

WCDMA 850 Left Cheek Middle

Date: 2013-12-20

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.909$ mho/m; $\epsilon_r = 42.042$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(8.92, 8.92, 8.92)

Cheek Middle/Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.241 W/kg

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.266 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.284 W/kg

SAR(1 g) = 0.228 W/kg; SAR(10 g) = 0.175 W/kg

Maximum value of SAR (measured) = 0.235 W/kg

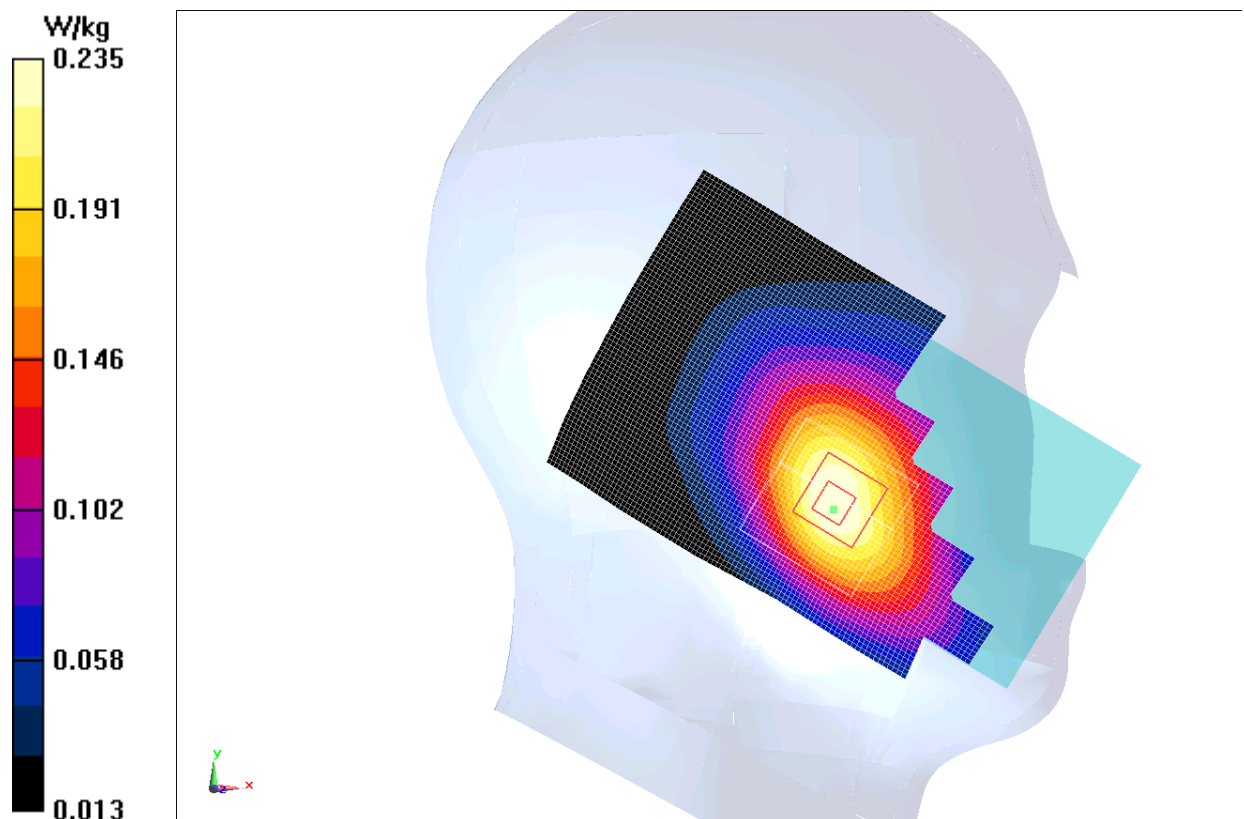


Fig.5 WCDMA 850 CH4182

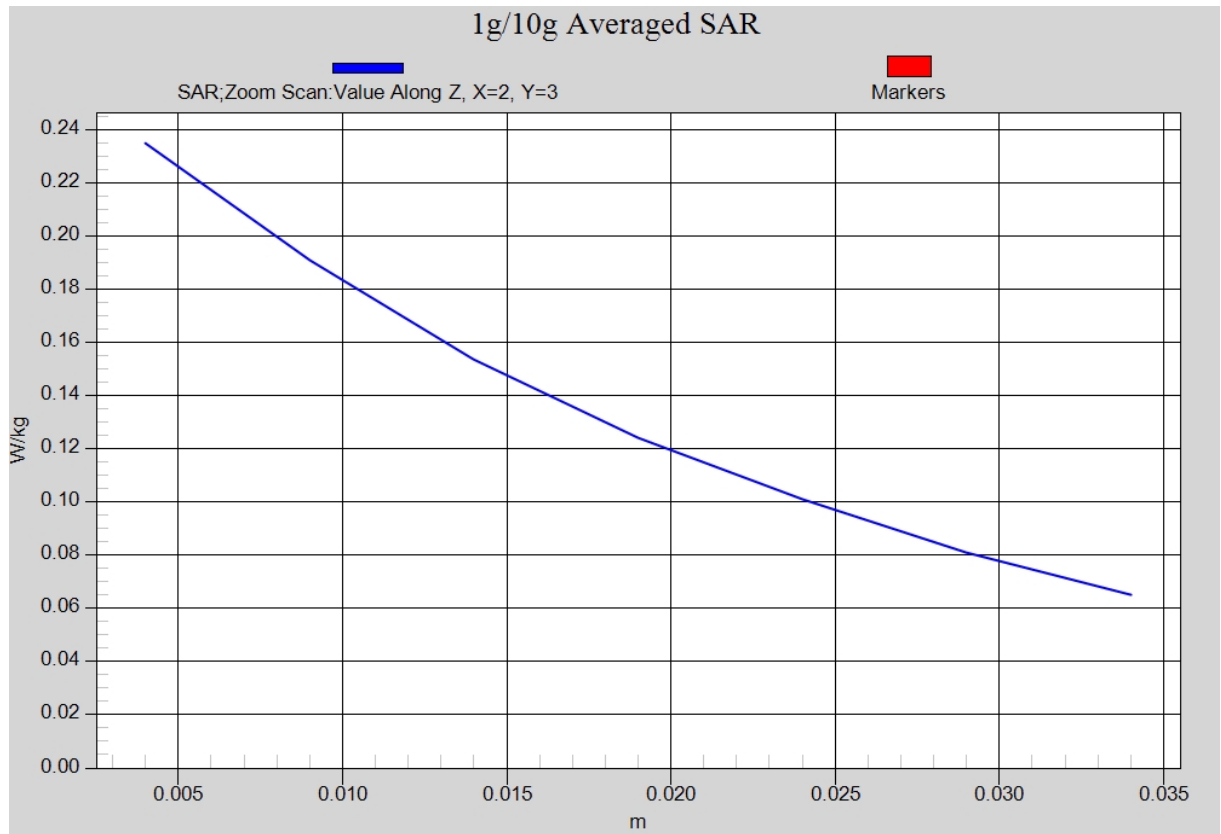


Fig. 5-1 Z-Scan at power reference point (WCDMA 850 CH4182)

WCDMA 850 Left Cheek Middle with Flip cover 1

Date: 2013-12-20

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.909$ mho/m; $\epsilon_r = 42.042$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(8.92, 8.92, 8.92)

Cheek Middle/Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.232 W/kg

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.243 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.275 W/kg

SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.160 W/kg

Maximum value of SAR (measured) = 0.226 W/kg

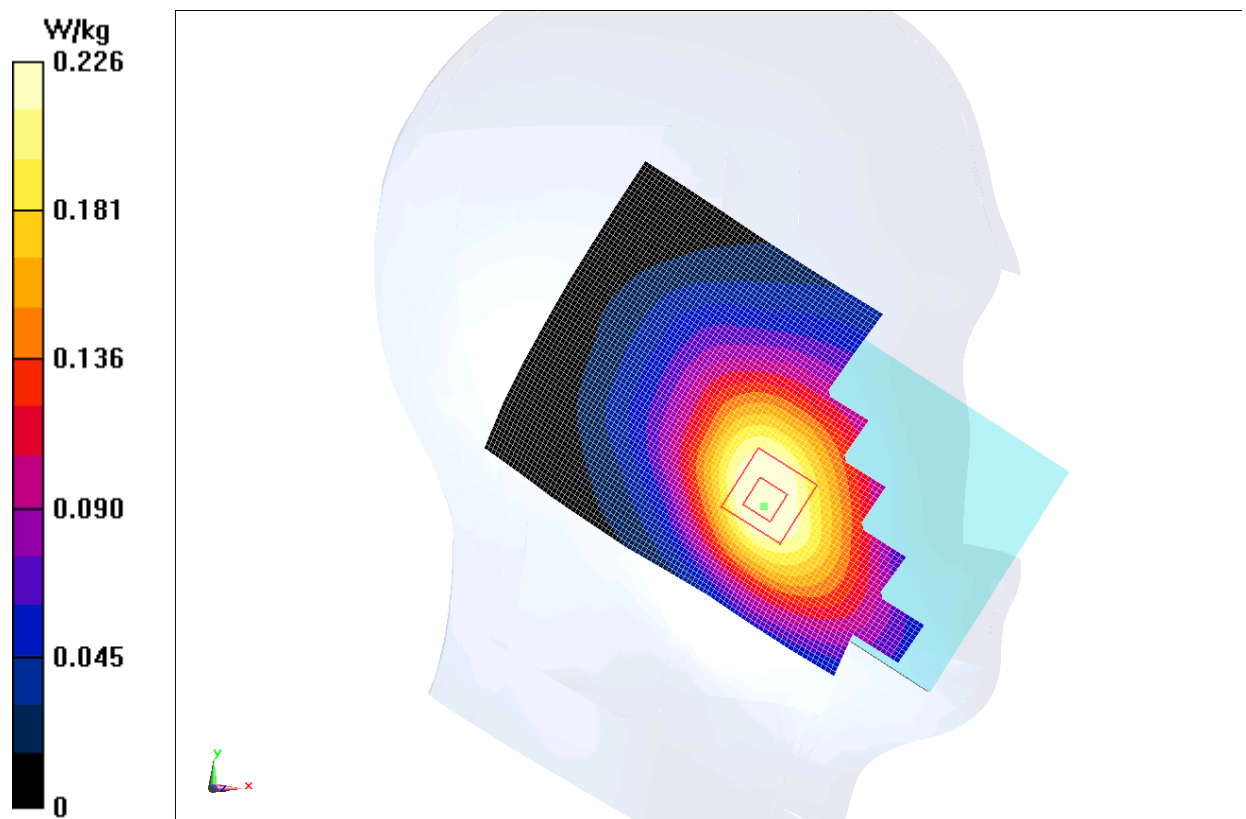


Fig.5-2 WCDMA 850 CH4182

WCDMA 850 Body Rear Middle

Date: 2013-12-20

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.985$ mho/m; $\epsilon_r = 55.591$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(8.73, 8.73, 8.73)

Rear Middle/Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.547 W/kg

Rear Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.417 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.670 W/kg

SAR(1 g) = 0.528 W/kg; SAR(10 g) = 0.394 W/kg

Maximum value of SAR (measured) = 0.552 W/kg

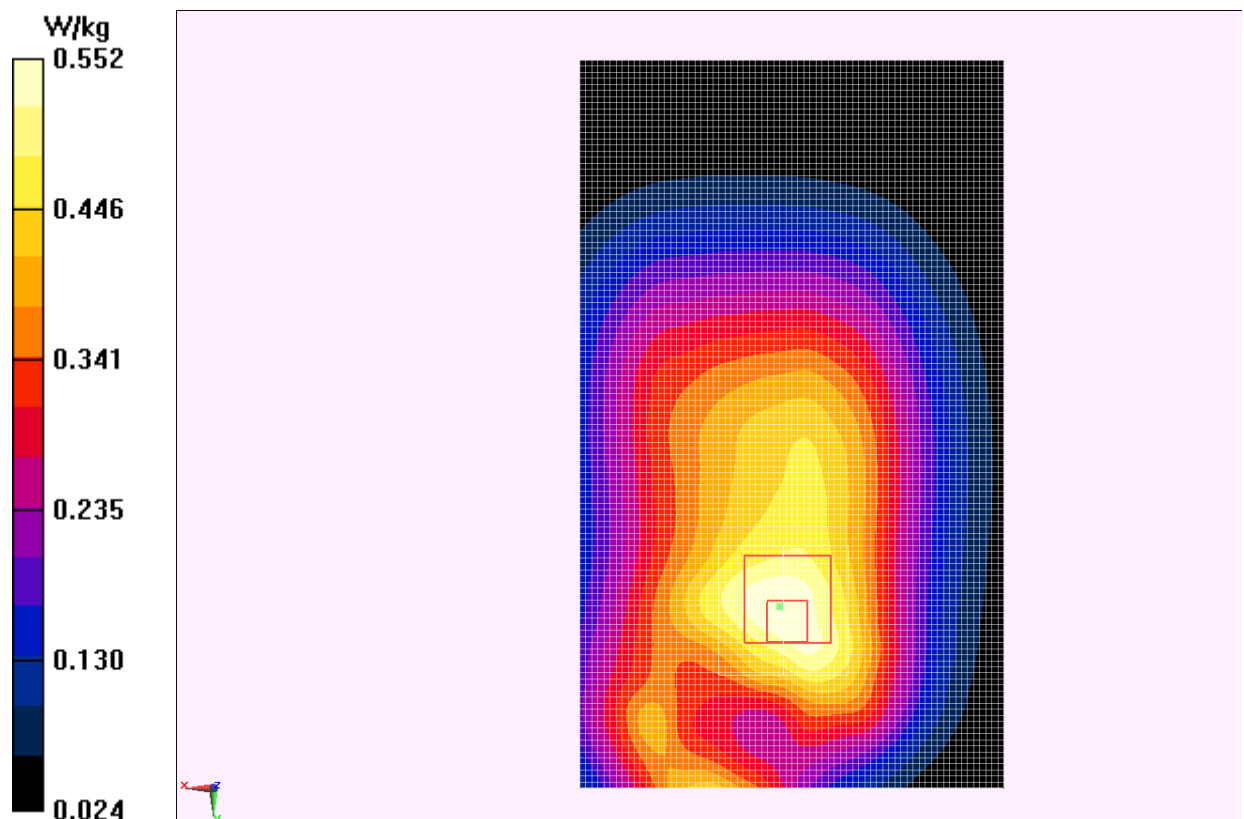


Fig.6 WCDMA 850 CH4182

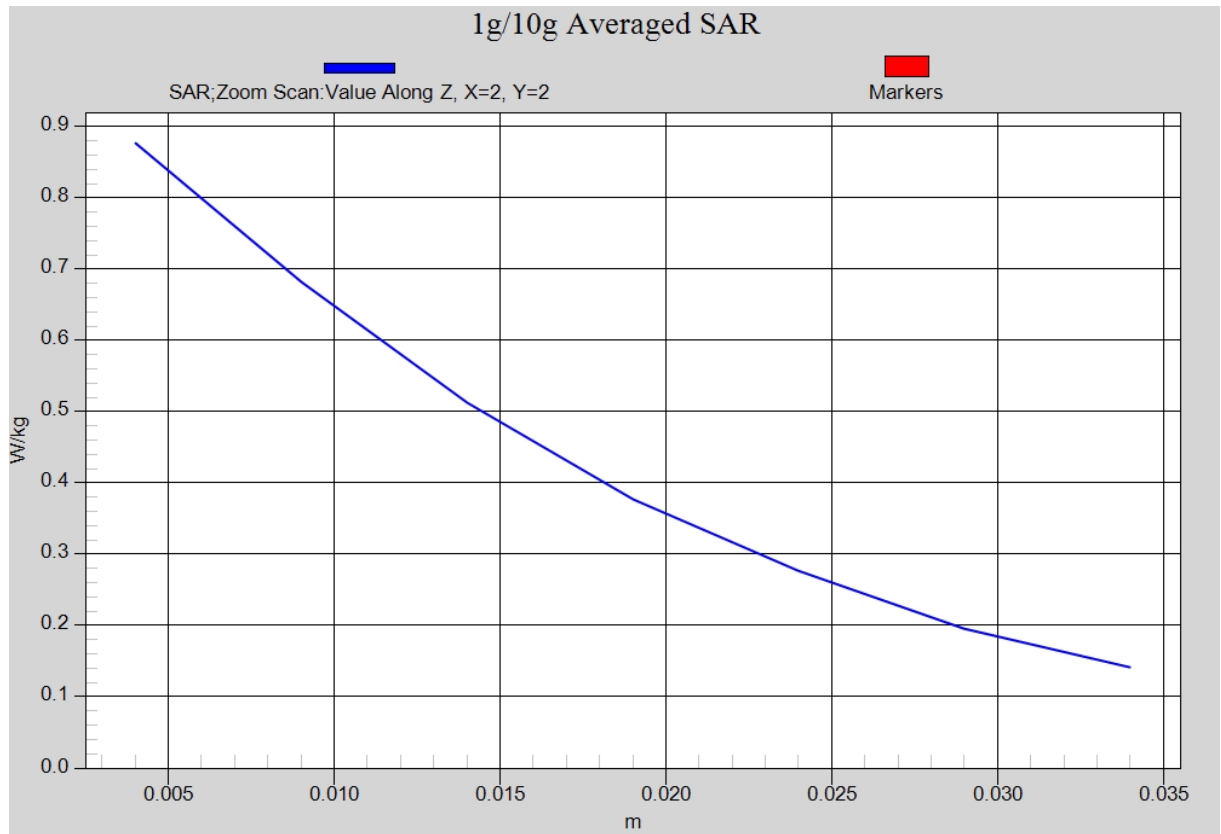


Fig. 6-1 Z-Scan at power reference point (WCDMA850 CH4182)

WCDMA 850 Body Rear Middle with Flip cover 1

Date: 2013-12-20

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.985$ mho/m; $\epsilon_r = 55.591$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(8.73, 8.73, 8.73)

Rear Middle/Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.538 W/kg

Rear Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.119 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.661 W/kg

SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.362 W/kg

Maximum value of SAR (measured) = 0.543 W/kg

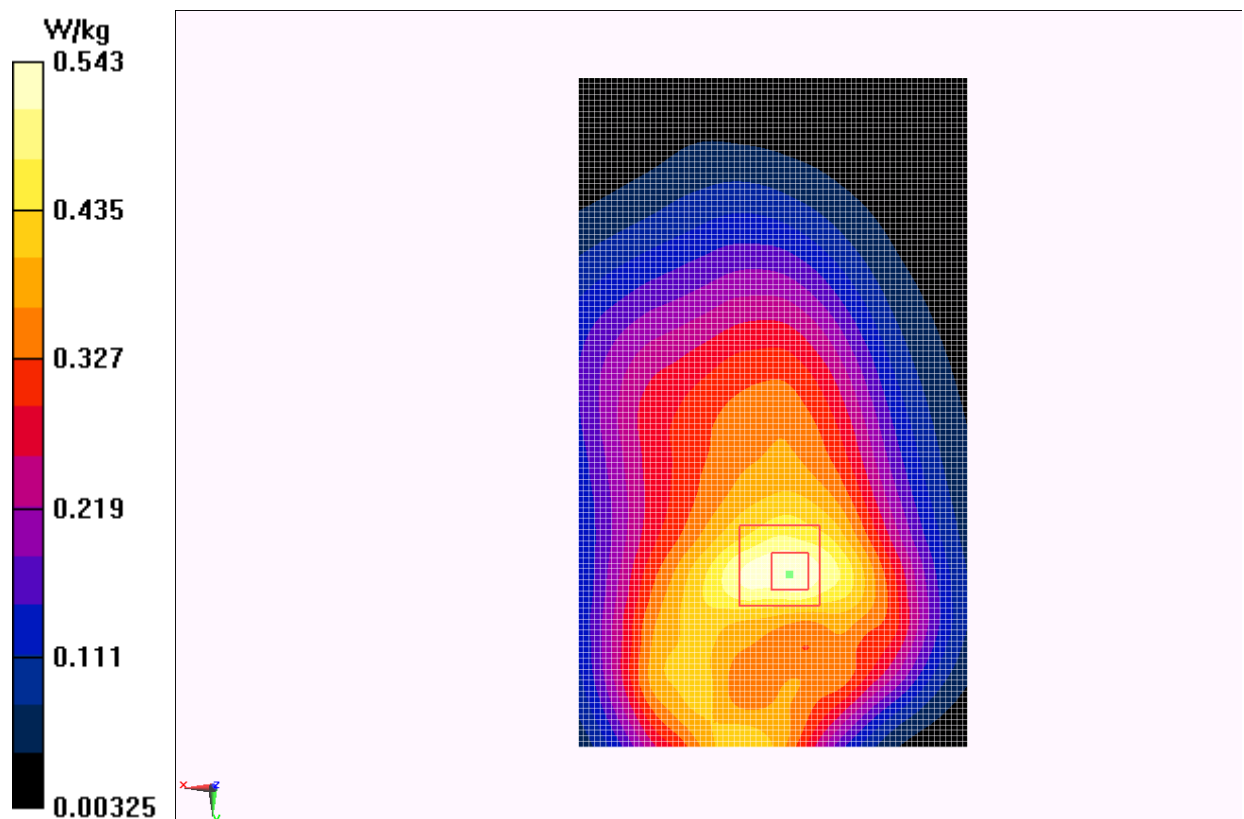


Fig.6-2 WCDMA 850 CH4182

WCDMA 1900 Left Cheek High

Date: 2013-12-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.362$ mho/m; $\epsilon_r = 39.679$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.57, 7.57, 7.57)

Cheek High/Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.129 W/kg

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.162 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.171 W/kg

SAR(1 g) = 0.112 W/kg; SAR(10 g) = 0.073 W/kg

Maximum value of SAR (measured) = 0.119 W/kg

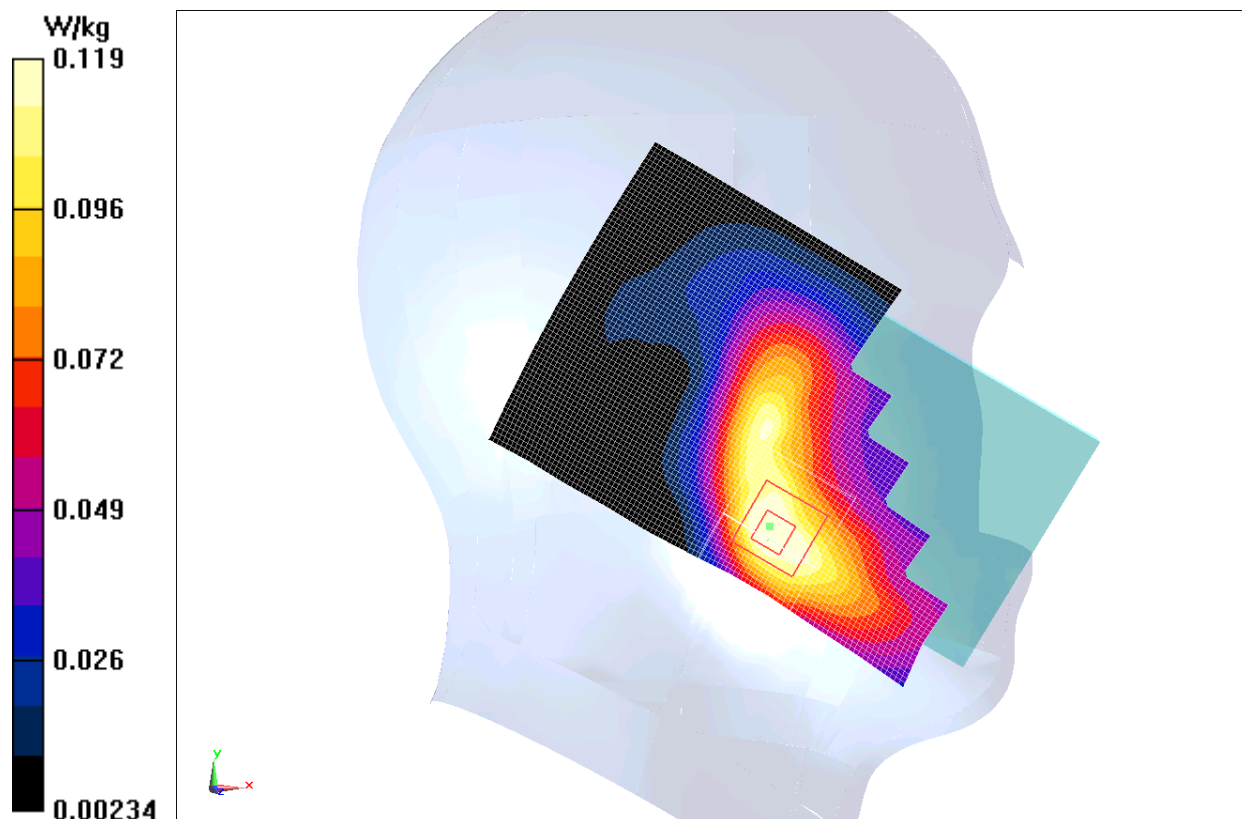


Fig.7 WCDMA1900 CH9538

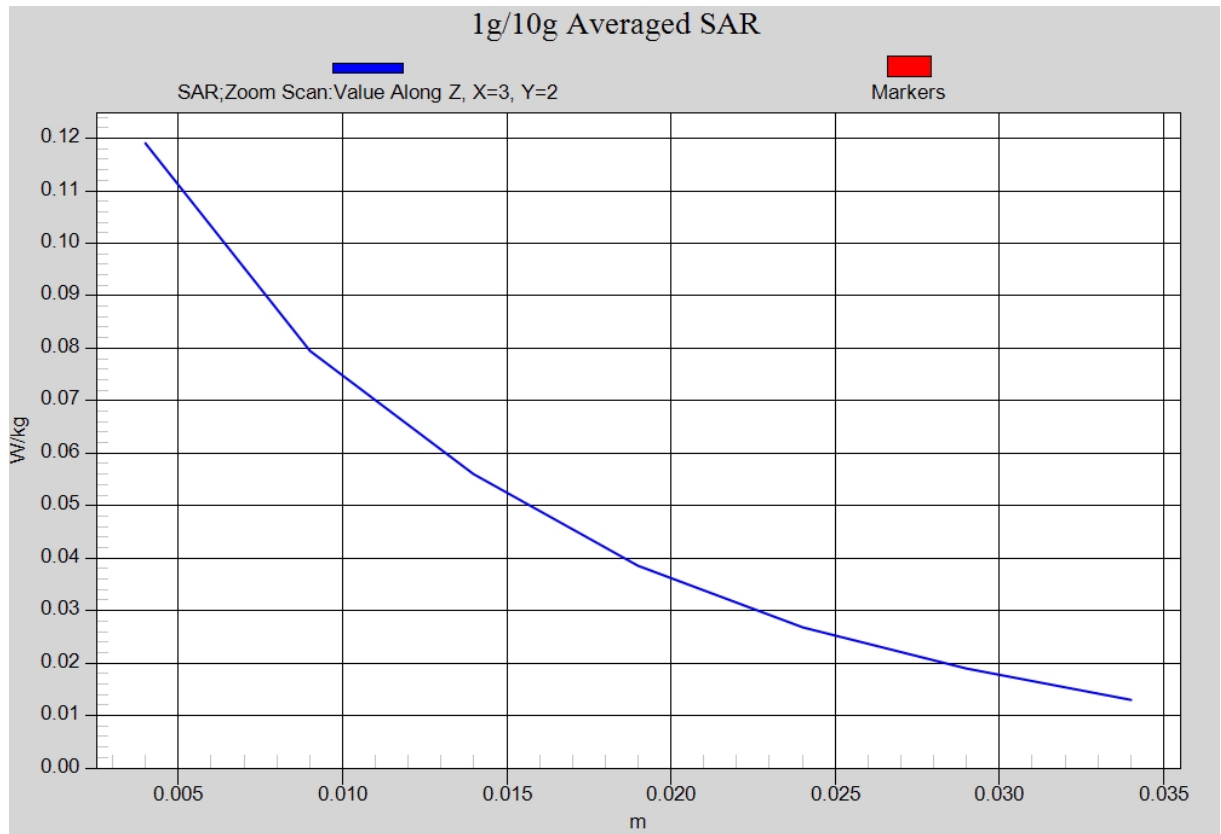


Fig. 7-1 Z-Scan at power reference point (WCDMA1900 CH9538)

WCDMA 1900 Left Cheek High with Flip cover 1

Date: 2013-12-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.362$ mho/m; $\epsilon_r = 39.679$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.57, 7.57, 7.57)

Cheek High/Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.104 W/kg

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.740 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.146 W/kg

SAR(1 g) = 0.082 W/kg; SAR(10 g) = 0.049 W/kg

Maximum value of SAR (measured) = 0.0940 W/kg

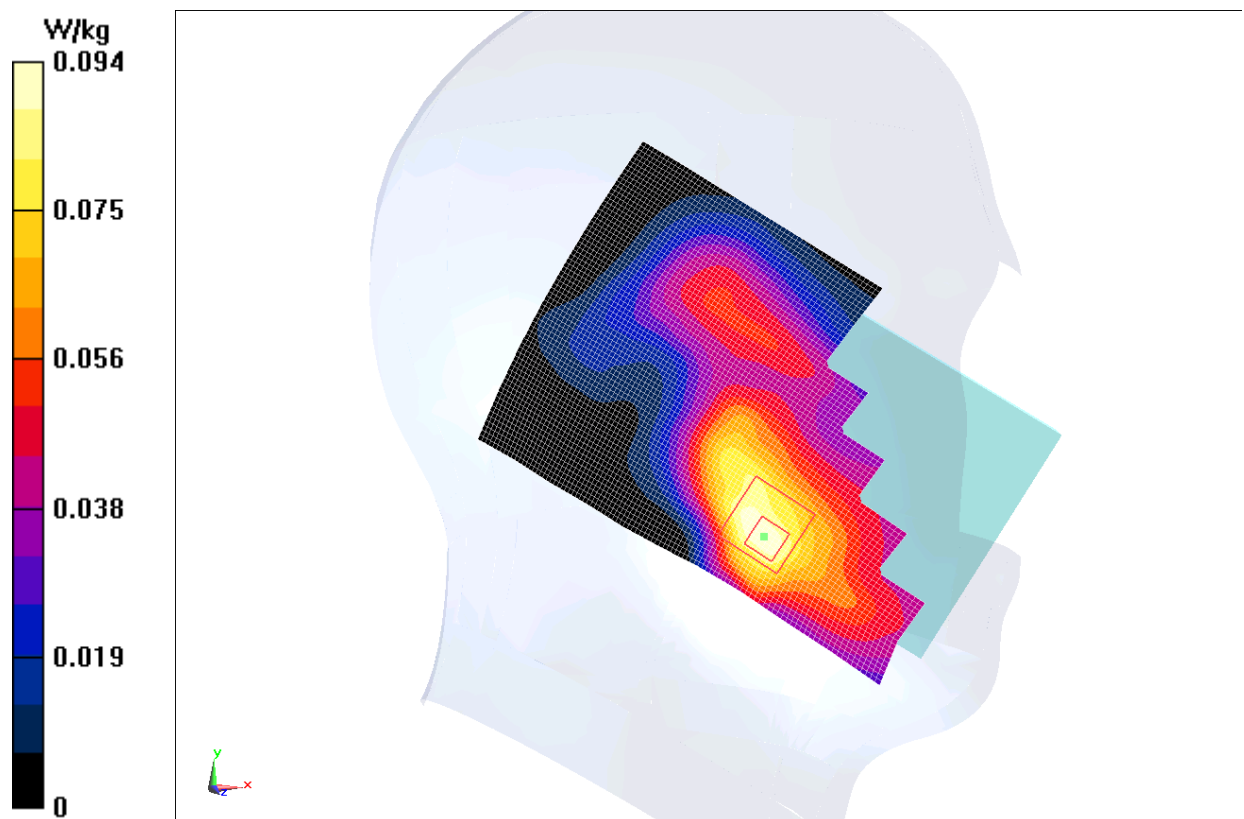


Fig.7-2 WCDMA1900 CH9538

WCDMA 1900 Body Rear Low

Date: 2013-12-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.441$ mho/m; $\epsilon_r = 50.901$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.03, 7.03, 7.03)

Rear Low/Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.19 W/kg

Rear Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.617 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.542 W/kg

Maximum value of SAR (measured) = 1.14 W/kg

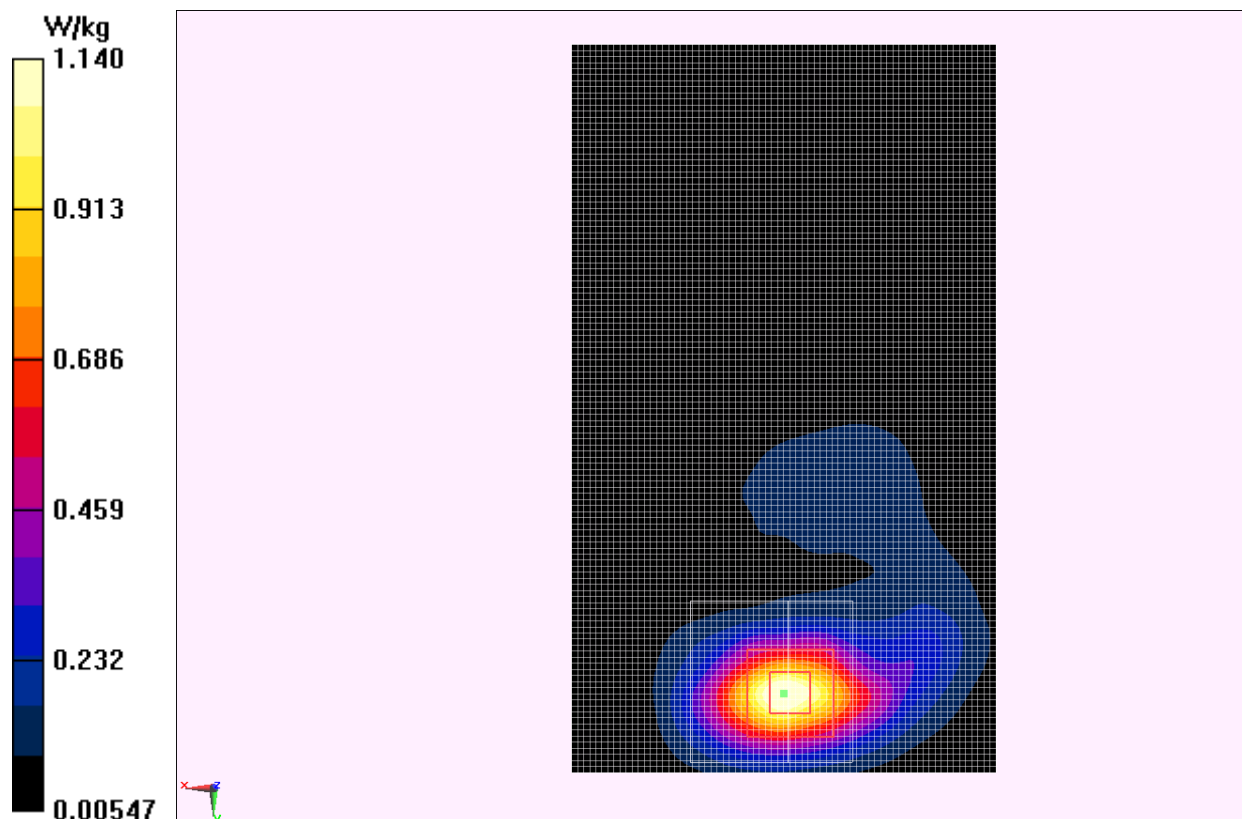


Fig.8 WCDMA1900 CH9262

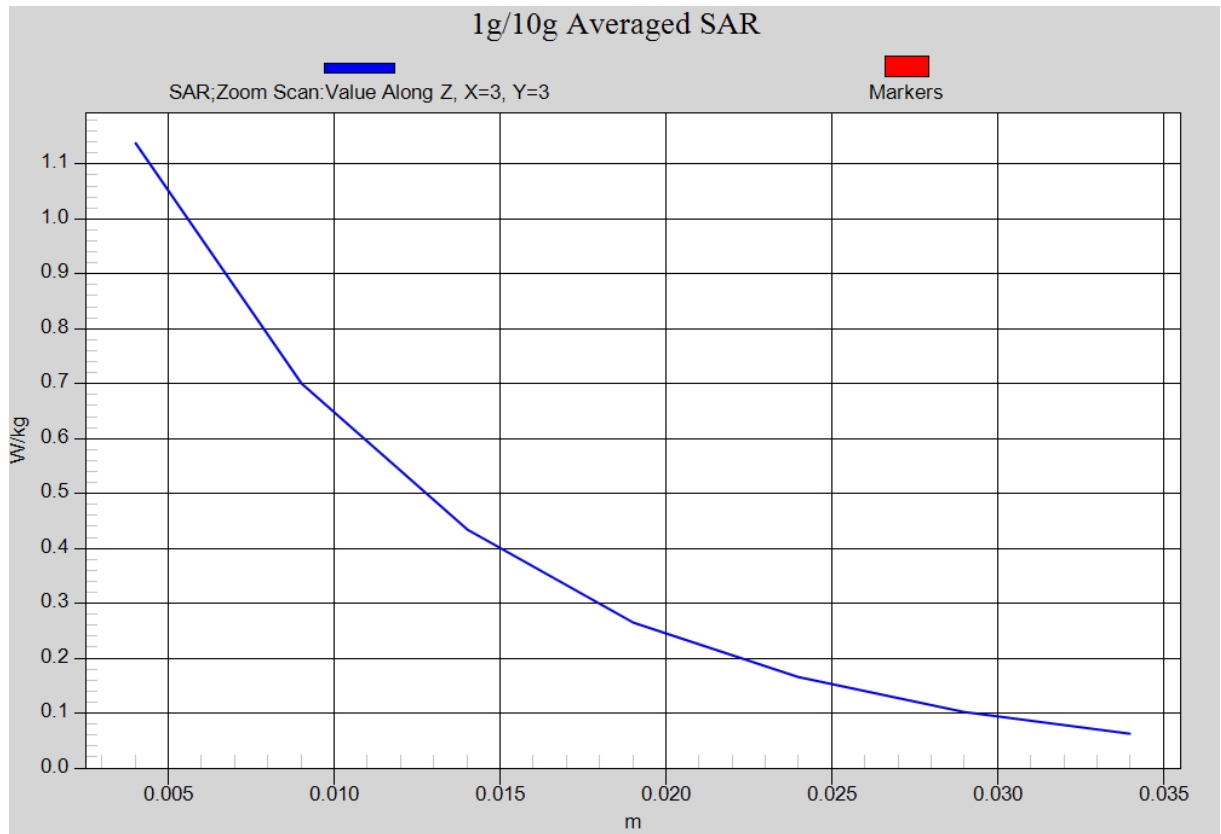


Fig. 8-1 Z-Scan at power reference point (WCDMA1900 CH9262)

WCDMA 1900 Body Rear Low with Flip cover 1

Date: 2013-12-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.441$ mho/m; $\epsilon_r = 50.901$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.03, 7.03, 7.03)

Rear Low/Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.06 W/kg

Rear Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.851 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.859 W/kg; SAR(10 g) = 0.426 W/kg

Maximum value of SAR (measured) = 1.01 W/kg

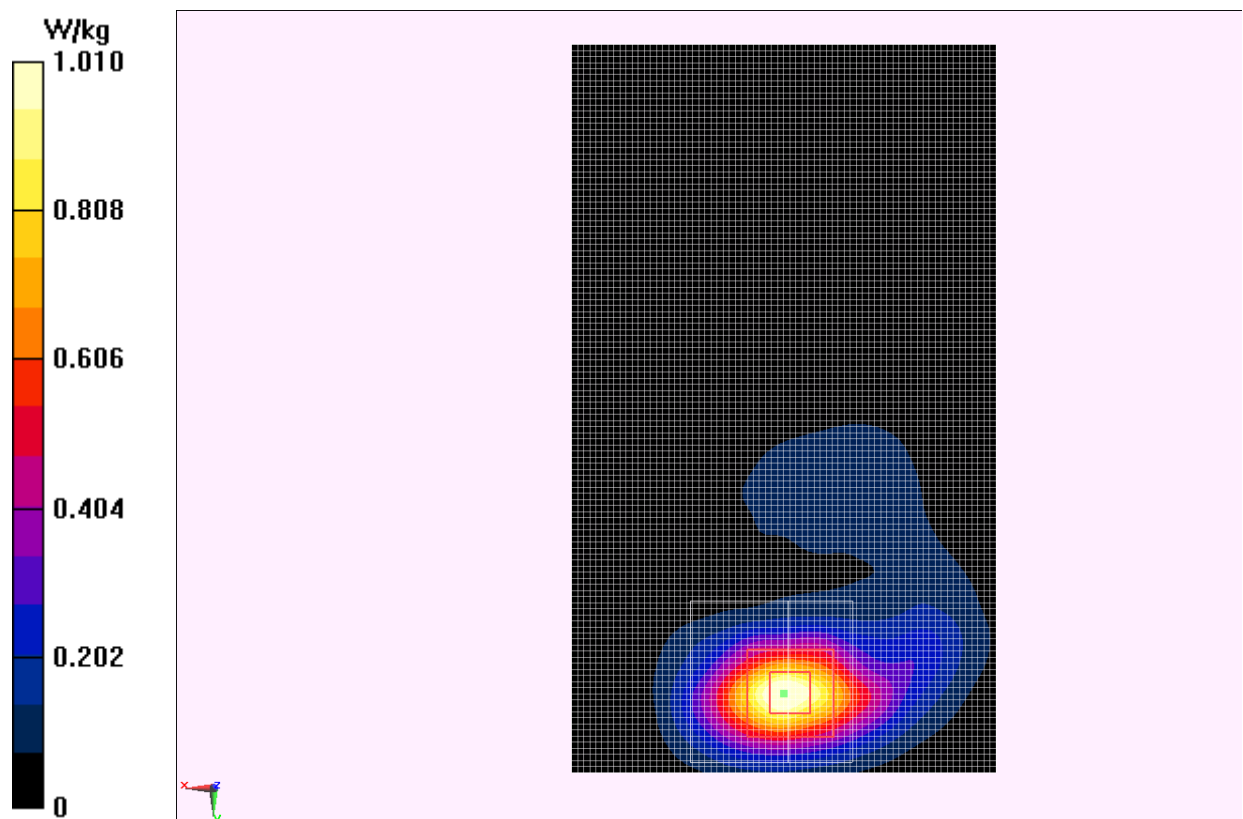


Fig.8-2 WCDMA1900 CH9262

Wifi 802.11b Right Cheek Channel 6

Date: 2013-12-22

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.818$ mho/m; $\epsilon_r = 39.702$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: WLAN 2450 Frequency: 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(6.78, 6.78, 6.78)

Cheek Middle/Area Scan (91x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.260 W/kg

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.590 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.352 W/kg

SAR(1 g) = 0.173 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.247 W/kg

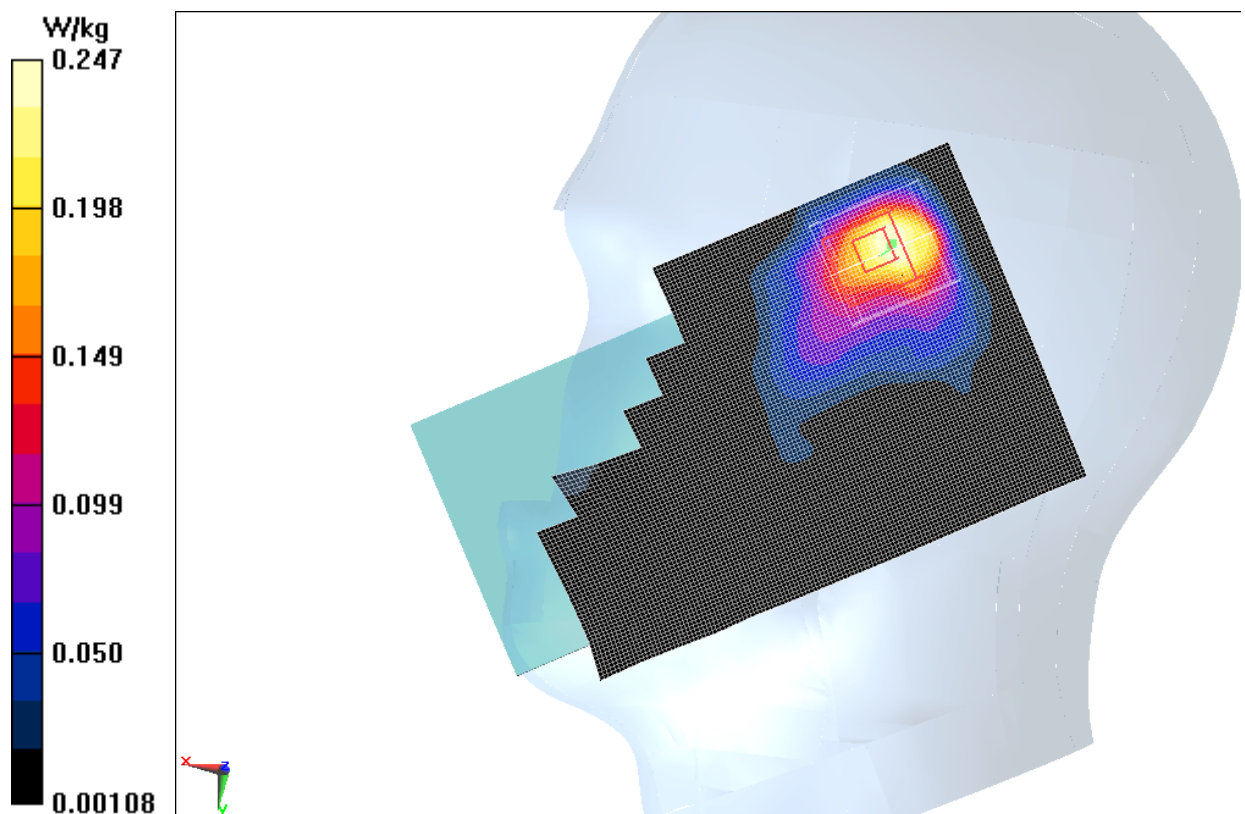


Fig.9 2450 MHz CH6

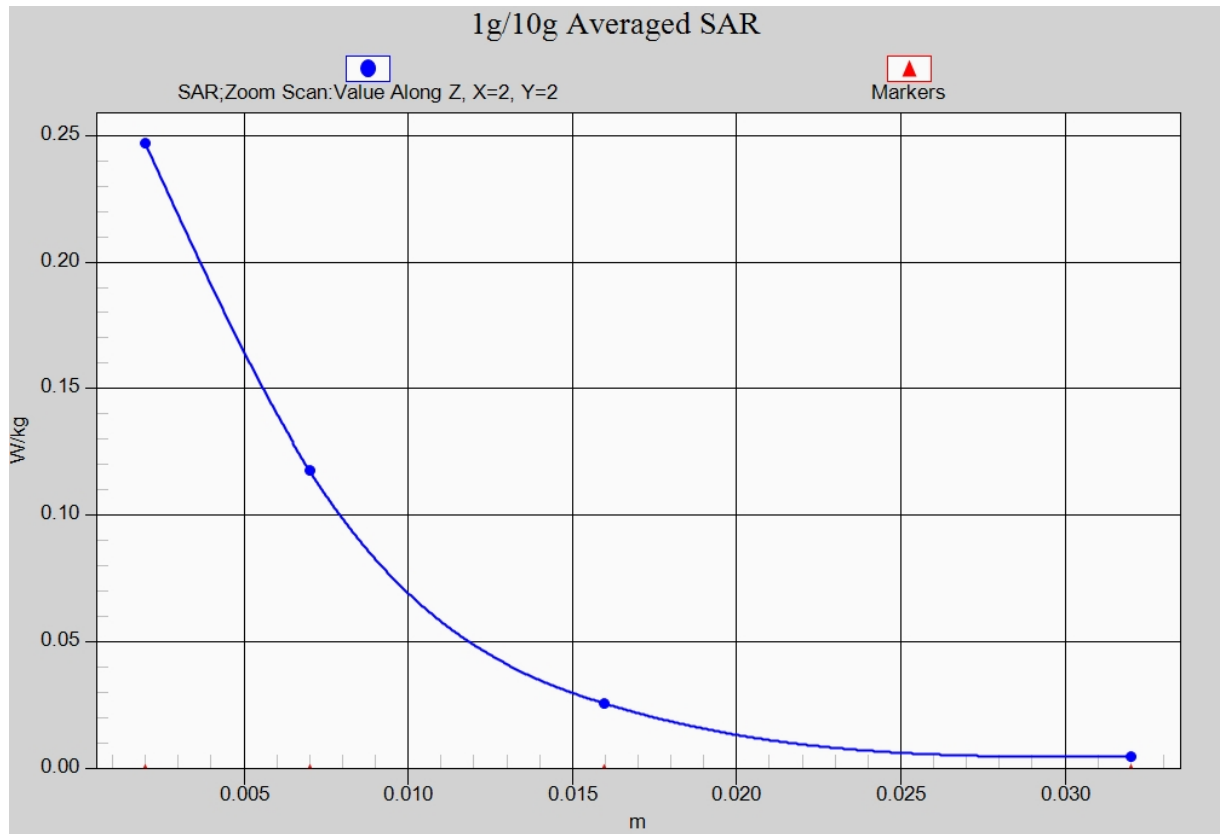


Fig. 9-1 Z-Scan at power reference point (2450 MHz CH6)

Wifi 802.11b Right Cheek Channel 6 with Flip cover 1

Date: 2013-12-22

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.818$ mho/m; $\epsilon_r = 39.702$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: WLAN 2450 Frequency: 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(6.78, 6.78, 6.78)

Cheek Middle/Area Scan (91x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.255 W/kg

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.460 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.348 W/kg

SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.080 W/kg

Maximum value of SAR (measured) = 0.243 W/kg

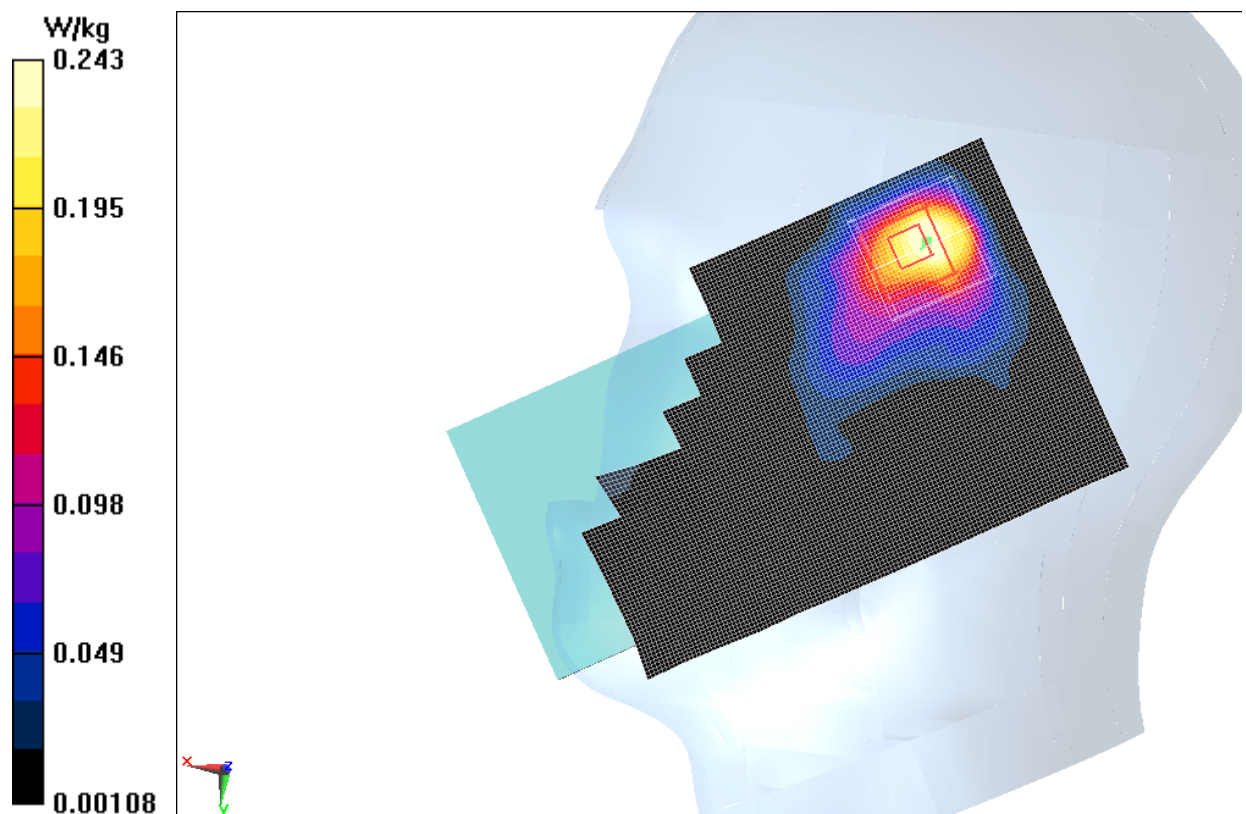


Fig.9-2 2450 MHz CH6

Wifi 802.11b Body Rear Channel 6

Date: 2013-12-22

Electronics: DAE4 Sn771

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.961$ mho/m; $\epsilon_r = 52.233$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: WLAN 2450 Frequency: 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(6.73, 6.73, 6.73)

Rear Middle/Area Scan (101x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0943 W/kg

Rear Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.623 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.117 W/kg

SAR(1 g) = 0.057 W/kg; SAR(10 g) = 0.027 W/kg

Maximum value of SAR (measured) = 0.0855 W/kg

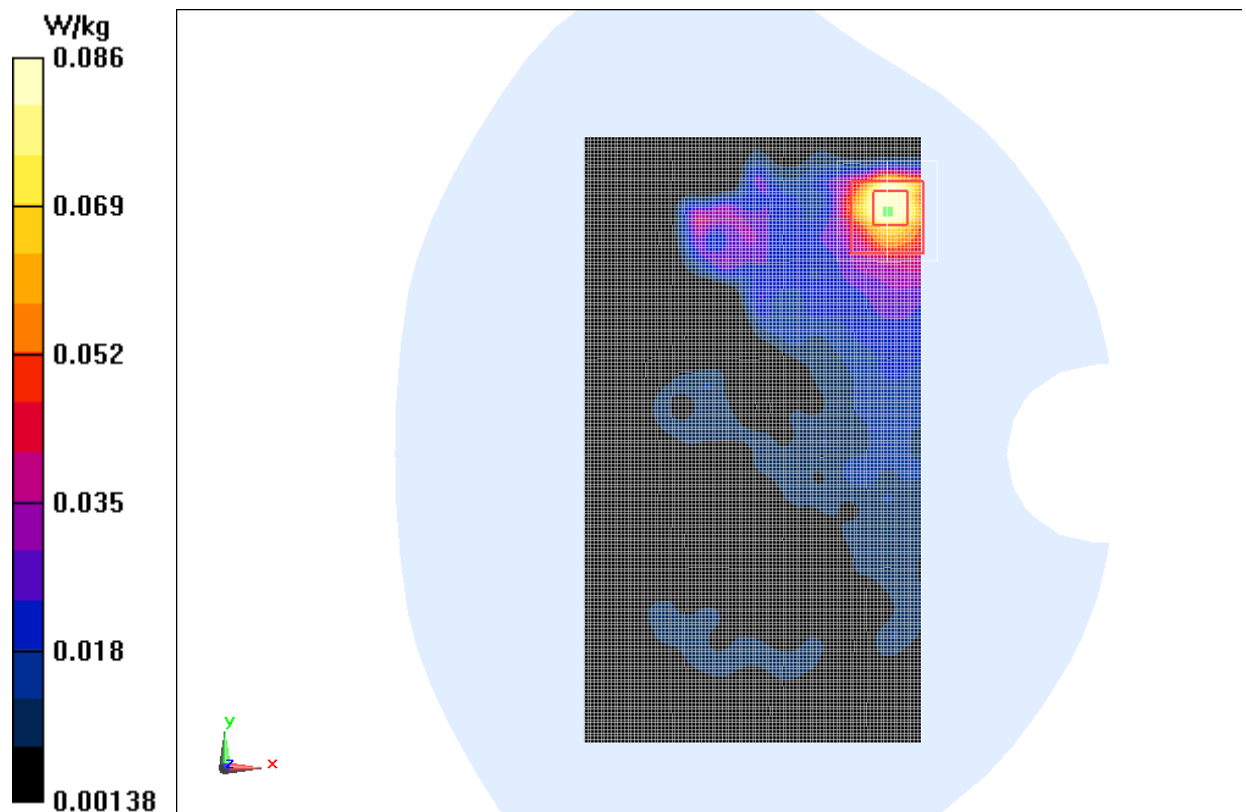


Fig.10 2450 MHz CH6

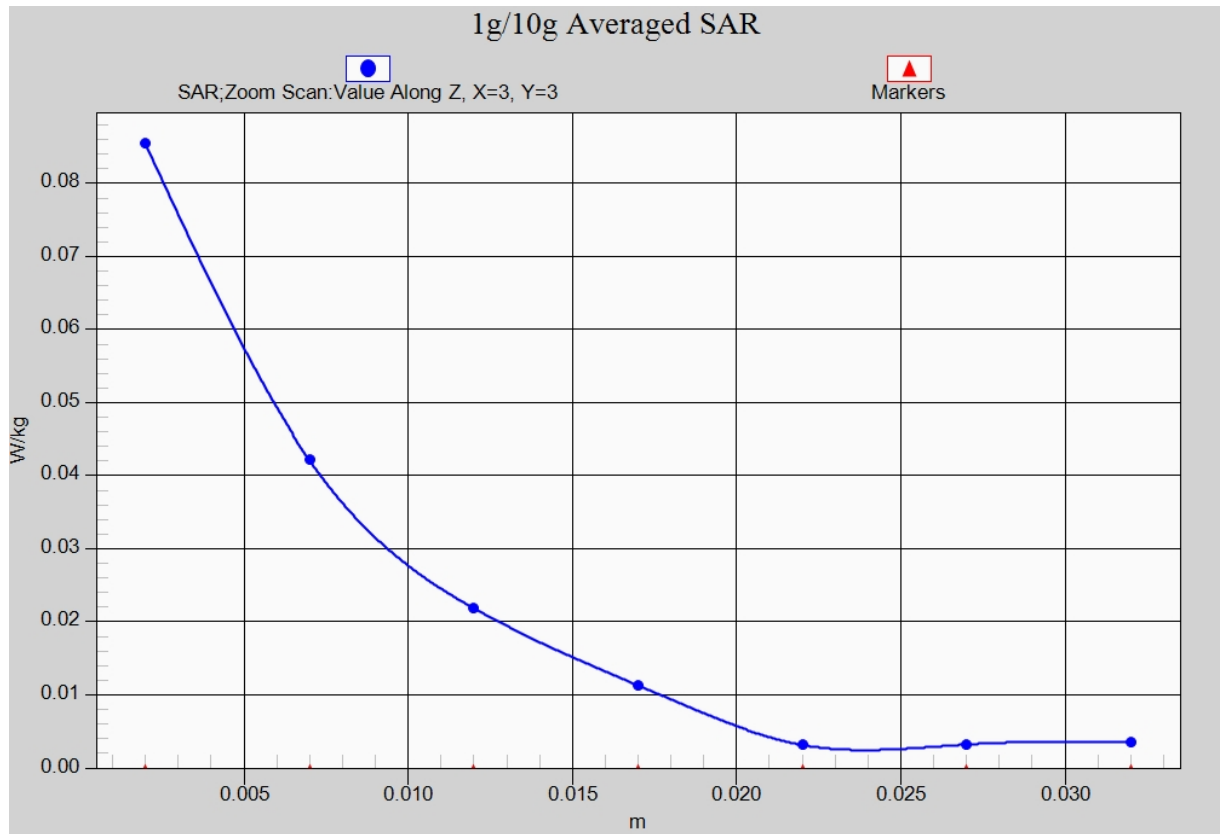


Fig. 10-1 Z-Scan at power reference point (2450 MHz CH6)

Wifi 802.11b Body Rear Channel 6

Date: 2013-12-22

Electronics: DAE4 Sn771

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.961$ mho/m; $\epsilon_r = 52.233$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: Wlan 2450 Frequency: 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(6.73, 6.73, 6.73)

Rear Middle/Area Scan (101x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0630 W/kg

Rear Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.501 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.0810 W/kg

SAR(1 g) = 0.040 W/kg; SAR(10 g) = 0.019 W/kg

Maximum value of SAR (measured) = 0.0596 W/kg

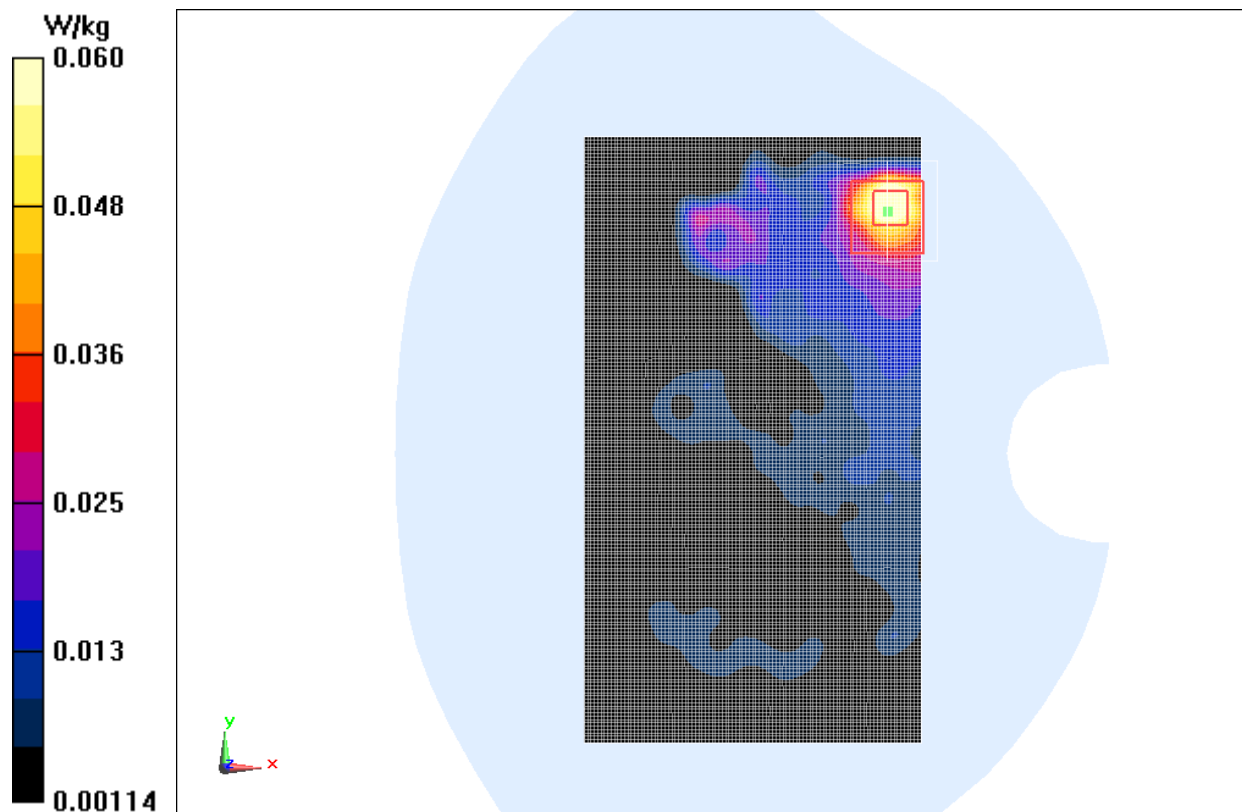


Fig.10-2 2450 MHz CH6

Wifi 802.11a Right Tilt Channel 56

Date: 2013-12-23

Electronics: DAE4 Sn771

Medium: Head 5GHz

Medium parameters used: $f = 5280$ MHz; $\sigma = 4.689$ mho/m; $\epsilon_r = 36.521$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: WLAN 5G Frequency: 5280 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(5.04, 5.04, 5.04)

Tilt/Area Scan (91x161x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.483 W/kg

Tilt/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 4.615 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.862 W/kg

SAR(1 g) = 0.208 W/kg; SAR(10 g) = 0.067 W/kg

Maximum value of SAR (measured) = 0.452 W/kg

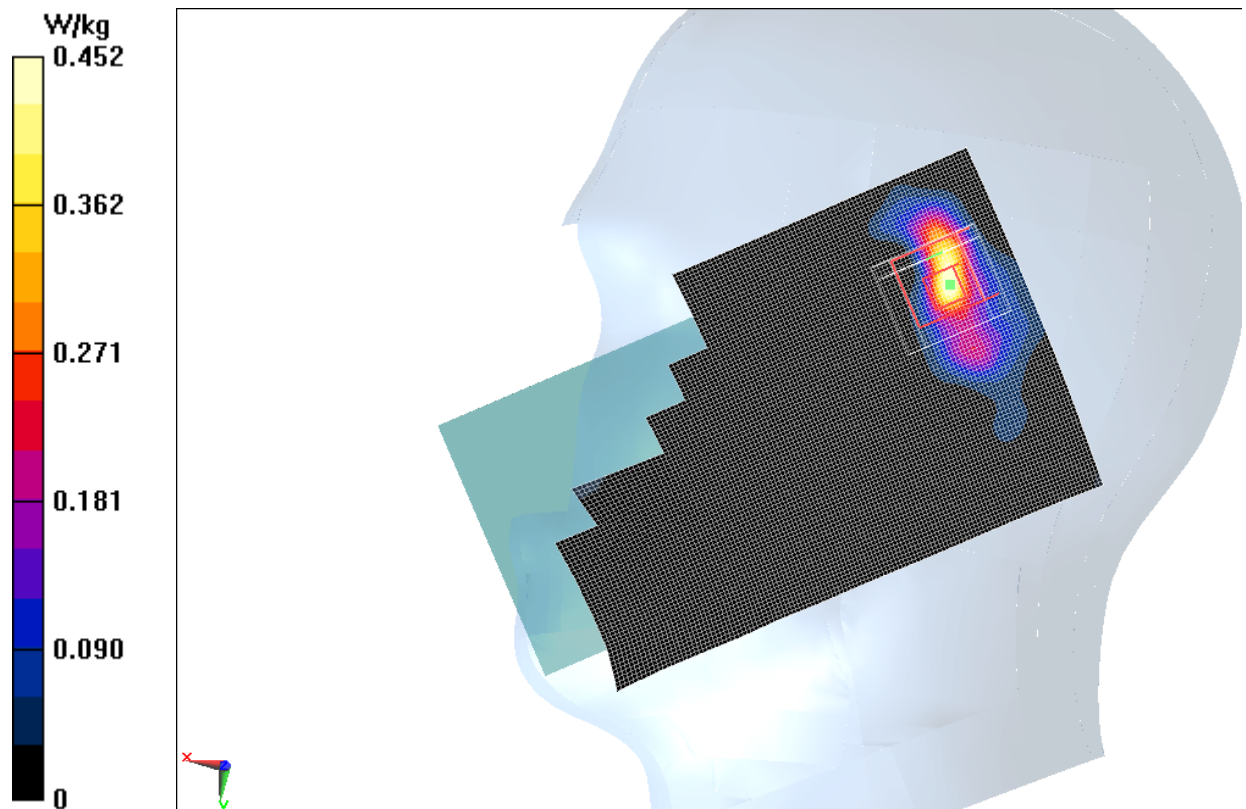


Fig.11 5GHz CH56

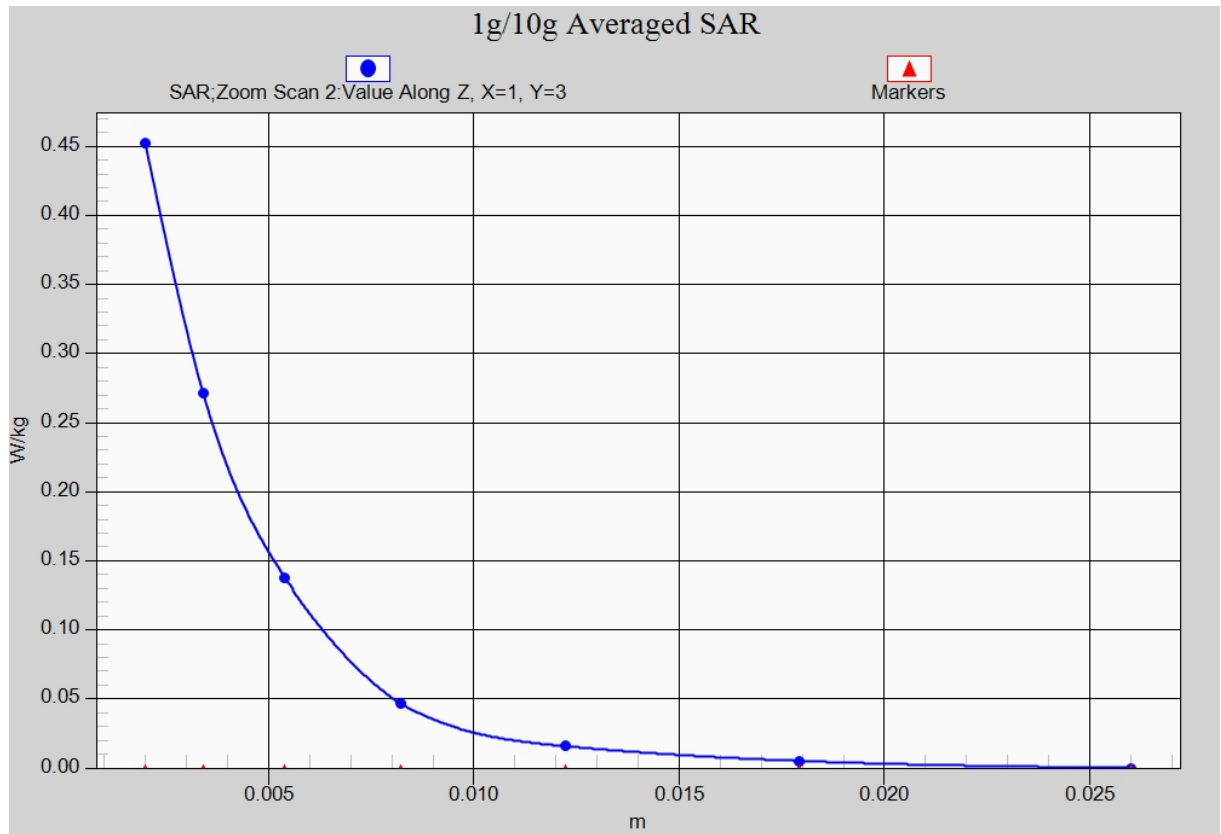


Fig. 11-1 Z-Scan at power reference point (5GHz CH56)

Wifi 802.11a Right Tilt Channel 56 with Flip cover 1

Date: 2013-12-23

Electronics: DAE4 Sn771

Medium: Head 5GHz

Medium parameters used: $f = 5280$ MHz; $\sigma = 4.689$ mho/m; $\epsilon_r = 36.521$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: WLAN 5G Frequency: 5280 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(5.04, 5.04, 5.04)

Tilt/Area Scan (91x161x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.478 W/kg

Tilt/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 4.325 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.857 W/kg

SAR(1 g) = 0.204 W/kg; SAR(10 g) = 0.065 W/kg

Maximum value of SAR (measured) = 0.448 W/kg

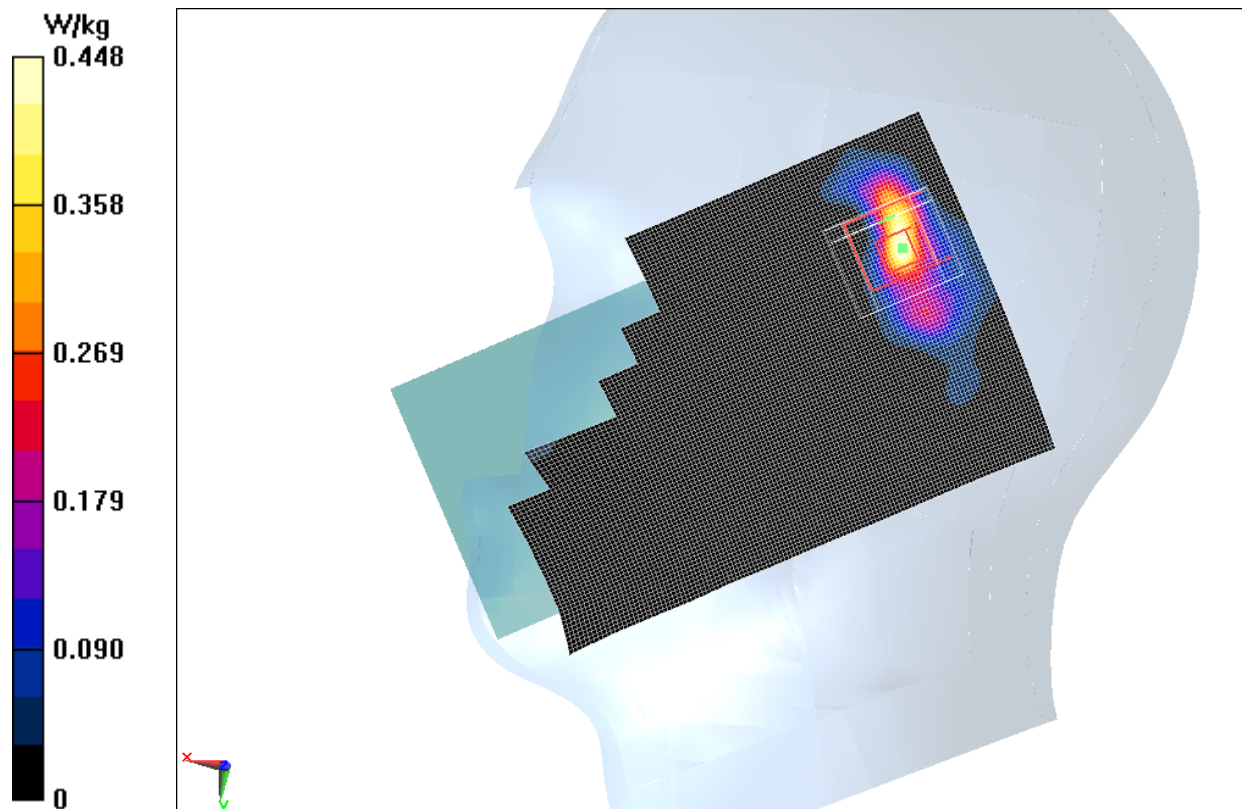


Fig.11-2 5GHz CH56

Wifi 802.11a Rear Channel 165

Date: 2013-12-24

Electronics: DAE4 Sn771

Medium: Body 5GHz

Medium parameters used: $f = 5825$ MHz; $\sigma = 6.034$ mho/m; $\epsilon_r = 46.859$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: WLAN 5G Frequency: 5825 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(3.94, 3.94, 3.94)

Rear/Area Scan (101x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.392 W/kg

Rear/Zoom Scan (8x8x18)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 0.210 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.517 W/kg

SAR(1 g) = 0.138 W/kg; SAR(10 g) = 0.038 W/kg

Maximum value of SAR (measured) = 0.242 W/kg

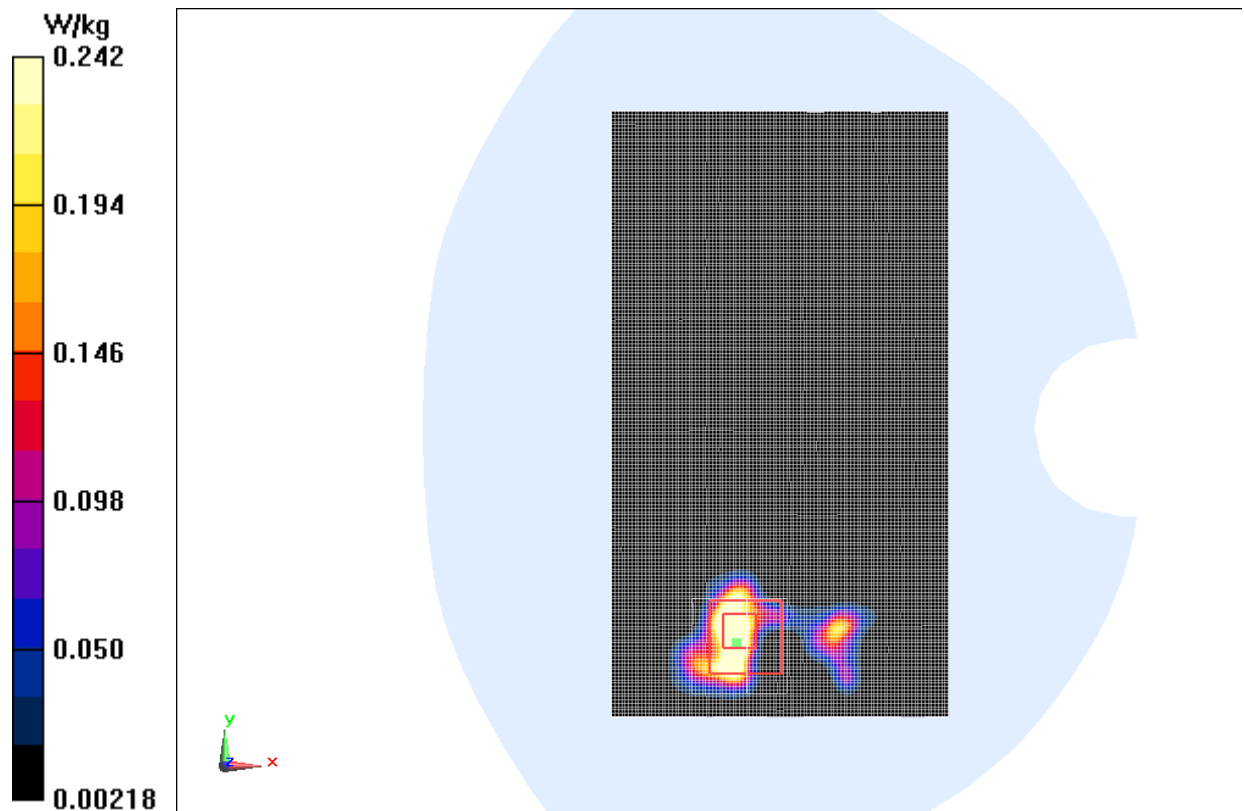


Fig.12 5GHz CH165

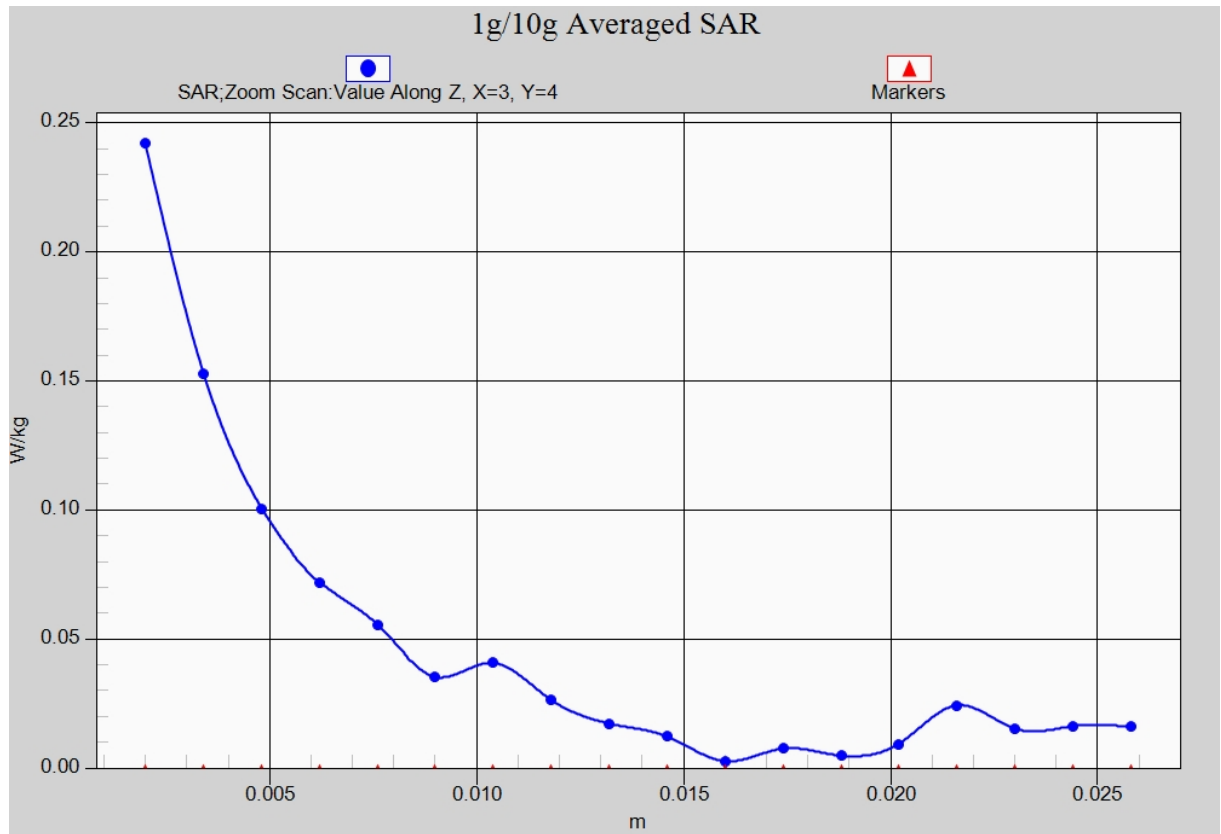


Fig. 12-1 Z-Scan at power reference point (5GHz CH165)

Wifi 802.11a Rear Channel 165 with Flip cover 1

Date: 2013-12-24

Electronics: DAE4 Sn771

Medium: Body 5GHz

Medium parameters used: $f = 5825$ MHz; $\sigma = 6.034$ mho/m; $\epsilon_r = 46.859$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: WLAN 5G Frequency: 5825 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(3.94, 3.94, 3.94)

Rear/Area Scan (101x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.266 W/kg

Rear/Zoom Scan (8x8x18)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 0.523 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.389 W/kg

SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.027 W/kg

Maximum value of SAR (measured) = 0.205 W/kg

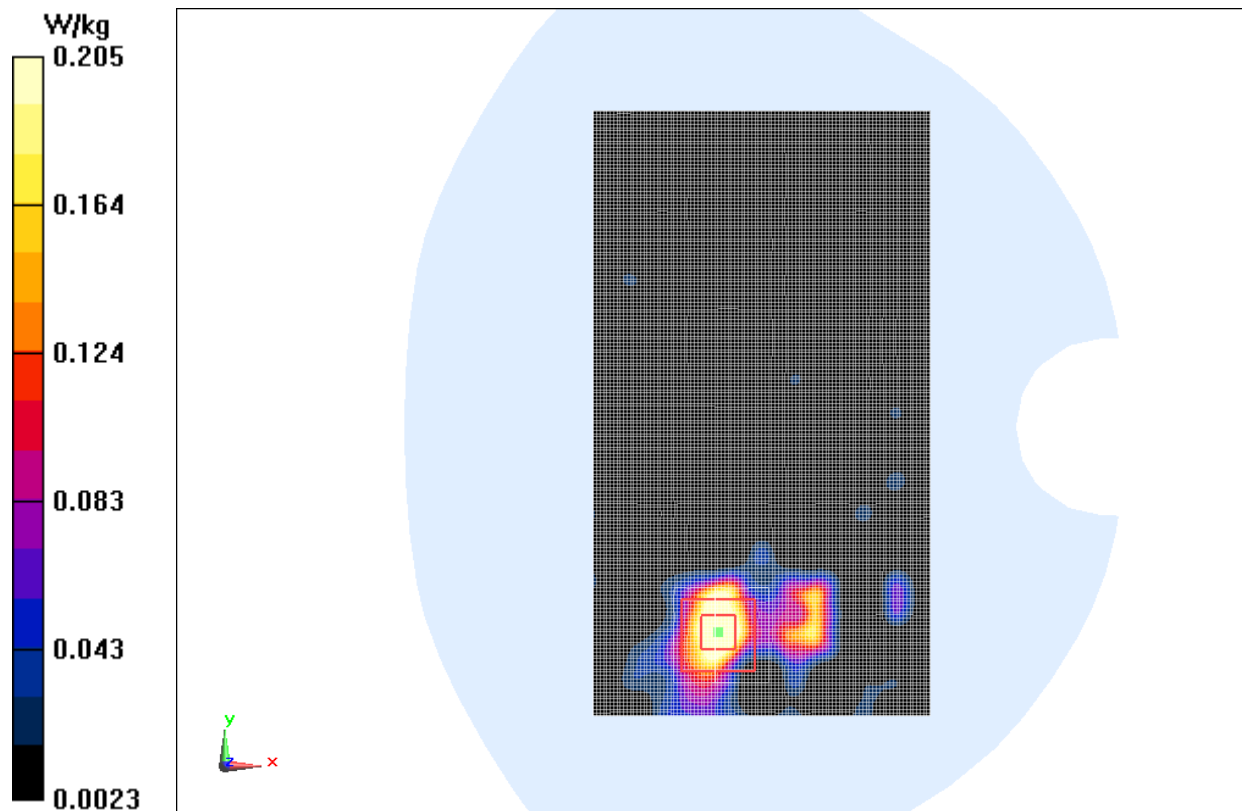


Fig.12-2 5GHz CH165

ANNEX B System Verification Results

835MHz

Date: 2013-12-20

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used: $f = 835$ MHz; $\sigma = 0.907$ mho/m; $\epsilon_r = 42.06$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(8.92, 8.92, 8.92)

System Validation /Area Scan (81x161x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 52.985 V/m; Power Drift = 0.09 dB

Fast SAR: SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.55 W/kg

Maximum value of SAR (interpolated) = 2.60 W/kg

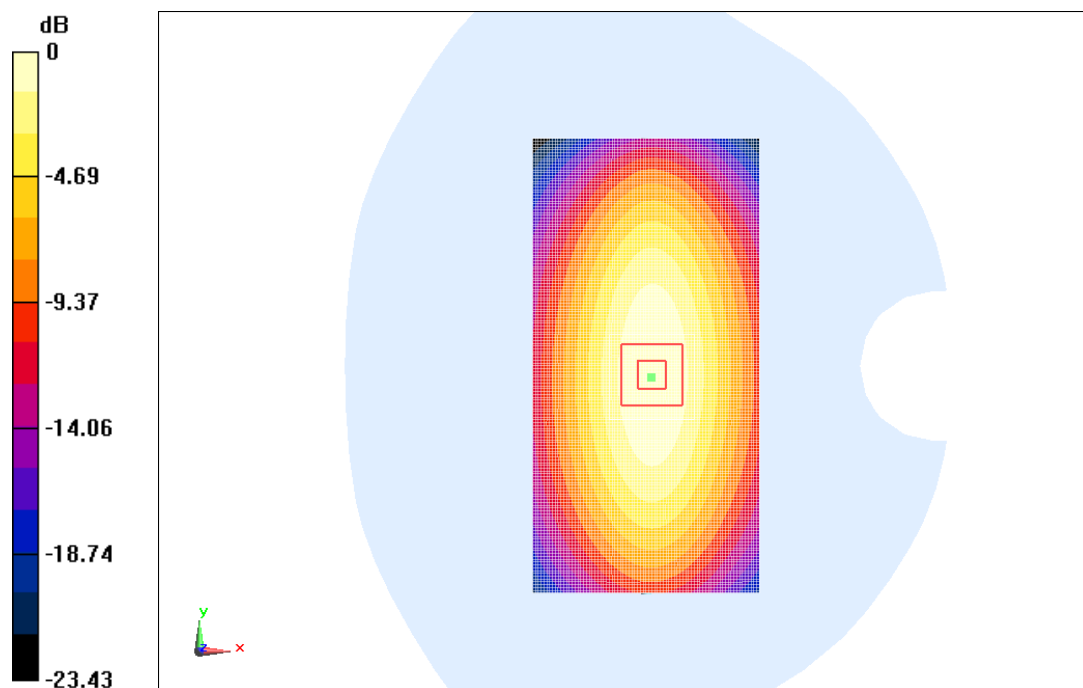
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.985 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.551 W/kg

SAR(1 g) = 2.42 W/kg; SAR(10 g) = 1.57 W/kg

Maximum value of SAR (measured) = 2.61 W/kg



0 dB = 2.60 W/kg = 8.30 dB W/kg

Fig.B.1 validation 835MHz 250mW

835MHz

Date: 2013-12-20

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.984 \text{ mho/m}$; $\epsilon_r = 55.61$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(8.73, 8.73, 8.73)

System Validation /Area Scan (81x171x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Reference Value = 47.208 V/m ; Power Drift = 0.11 dB

Fast SAR: SAR(1 g) = 2.48 W/kg ; SAR(10 g) = 1.64 W/kg

Maximum value of SAR (interpolated) = 2.65 W/kg

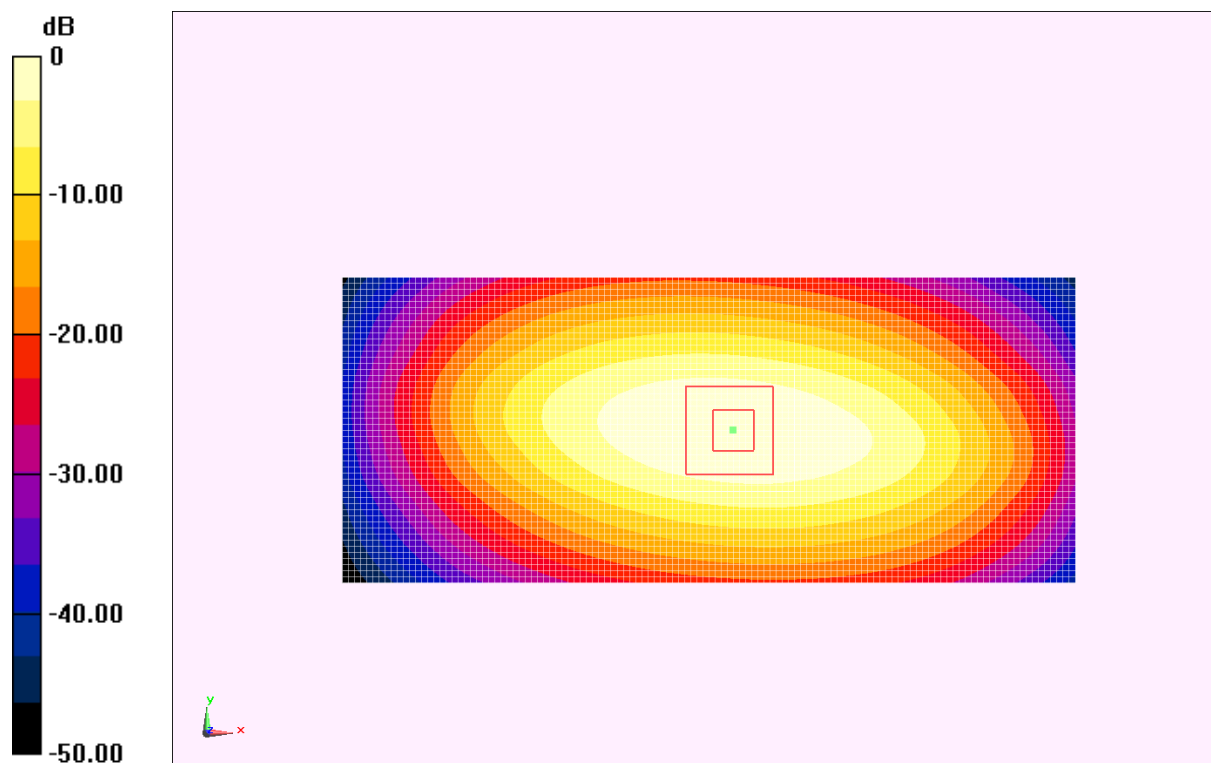
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 47.208 V/m ; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 3.642 W/kg

SAR(1 g) = 2.44 W/kg ; SAR(10 g) = 1.61 W/kg

Maximum value of SAR (measured) = 2.63 W/kg



0 dB = 2.65 W/kg = 8.46 dB W/kg

Fig.B.2 validation 835MHz 250mW

1900MHz

Date: 2013-12-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.407$ mho/m; $\epsilon_r = 39.22$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.57, 7.57, 7.57)

System Validation/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 96.843 V/m; Power Drift = -0.14 dB

Fast SAR: SAR(1 g) = 9.87 W/kg; SAR(10 g) = 5.26 W/kg

Maximum value of SAR (interpolated) = 11.2 W/kg

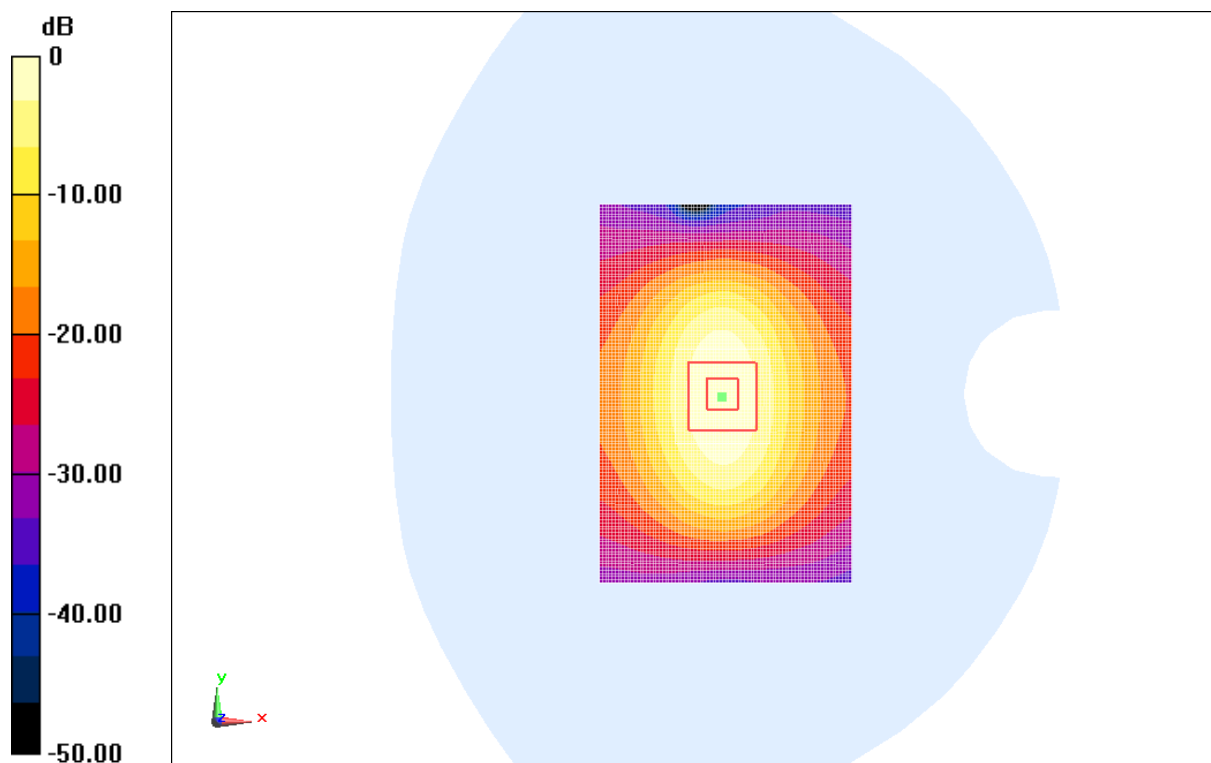
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.843 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 18.21 W/kg

SAR(1 g) = 9.77 W/kg; SAR(10 g) = 5.19 W/kg

Maximum value of SAR (measured) = 11.1 W/kg



0 dB = 11.2 W/kg = 20.98 dB W/kg

Fig.B.3 validation 1900MHz 250mW

1900MHz

Date: 2013-12-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.513 \text{ mho/m}$; $\epsilon_r = 52.23$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.03, 7.03, 7.03)

System Validation/Area Scan (81x121x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Reference Value = 84.639 V/m ; Power Drift = -0.08 dB

Fast SAR: SAR(1 g) = 10.1 W/kg ; SAR(10 g) = 5.32 W/kg

Maximum value of SAR (interpolated) = 11.5 W/kg

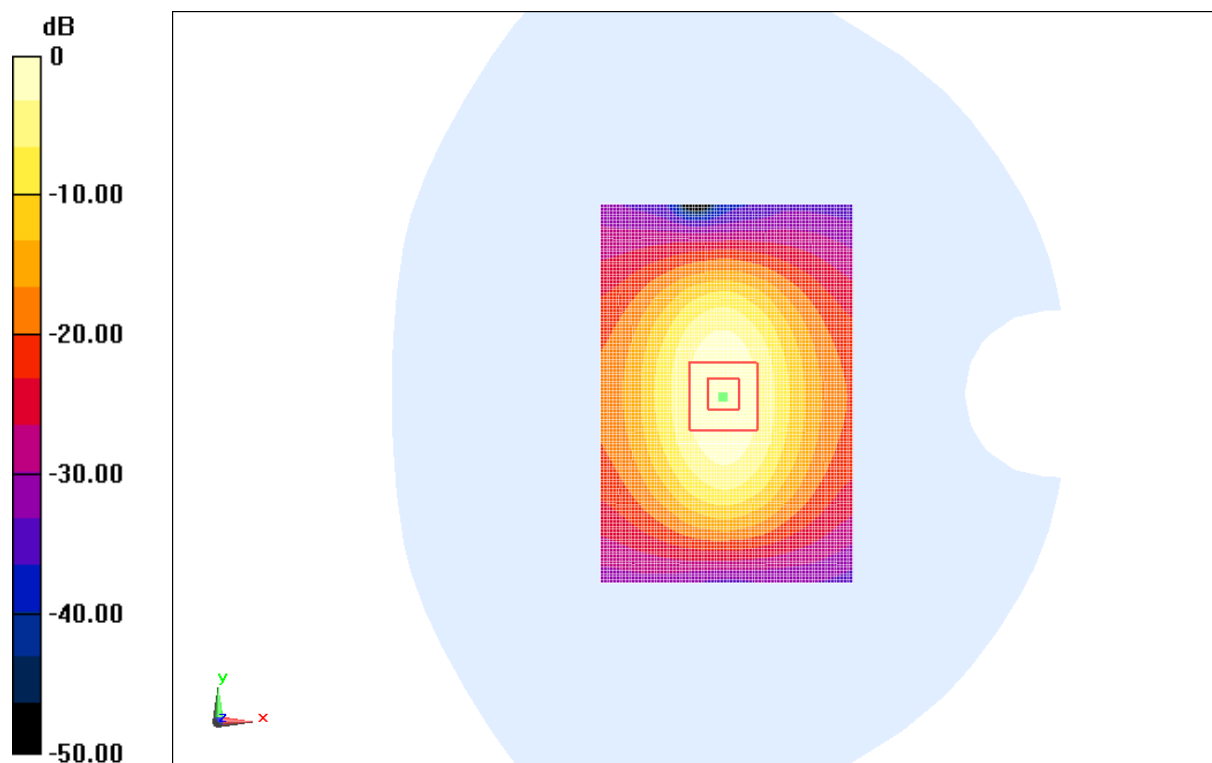
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 84.639 V/m ; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 16.67 W/kg

SAR(1 g) = 10.2 W/kg ; SAR(10 g) = 5.40 W/kg

Maximum value of SAR (measured) = 11.6 W/kg



0 dB = 11.5 W/kg = 21.21 dB W/kg

Fig.B.4 validation 1900MHz 250mW

2450MHz

Date: 2013-12-22

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.831$ mho/m; $\epsilon_r = 39.64$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(6.78, 6.78, 6.78)

System Validation /Area Scan (81x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 15.1 W/kg

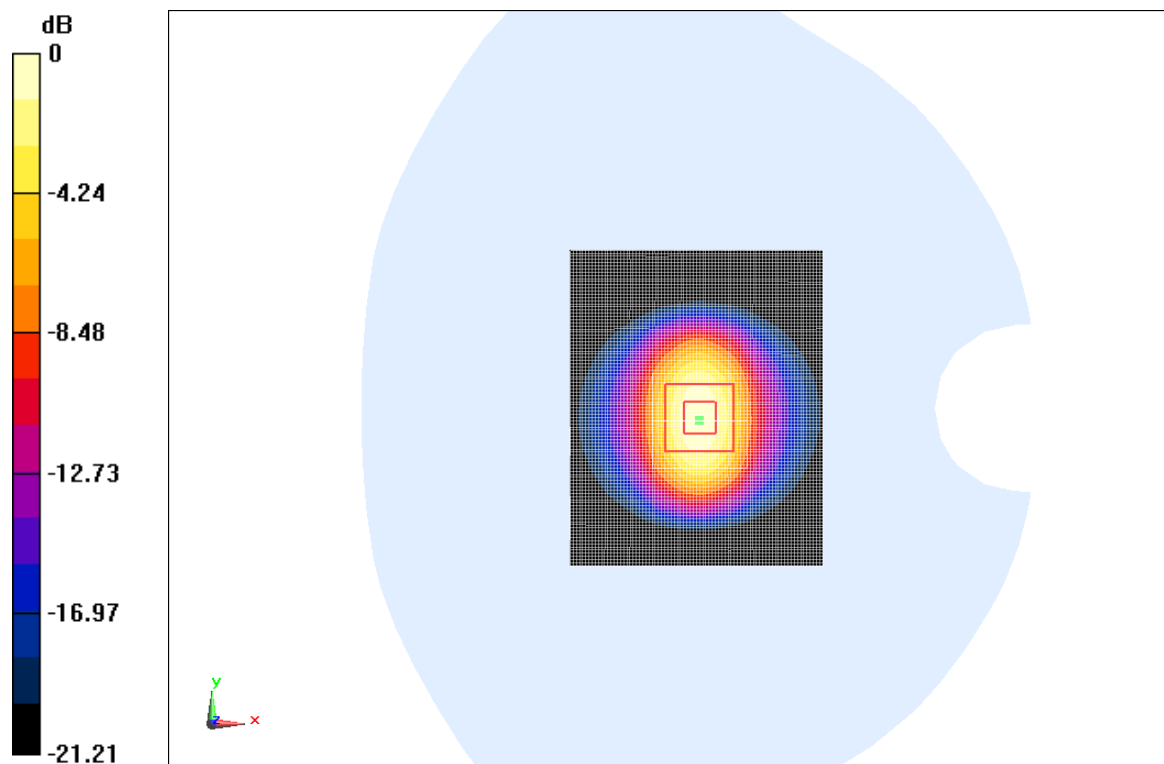
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.857 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 26.18 W/kg

SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.18 W/kg

Maximum value of SAR (measured) = 15.0 W/kg



0 dB = 15.1 W/kg = 23.58 dB W/kg

Fig.B.5 validation 2450MHz 250mW

2450MHz

Date: 2013-12-22

Electronics: DAE4 Sn771

Medium: Body 2450 MHz

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.975 \text{ mho/m}$; $\epsilon_r = 52.19$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(6.73, 6.73, 6.73)

System Validation/Area Scan (81x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 14.9 W/kg

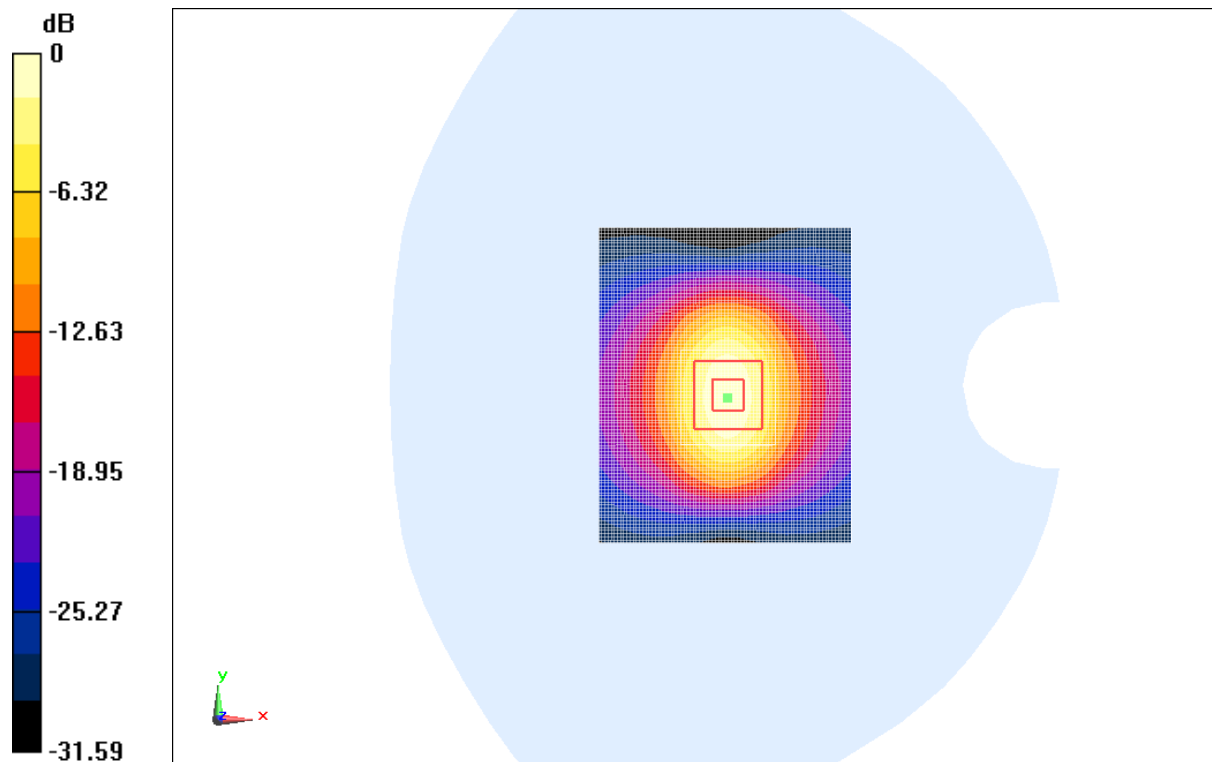
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$,
 $dz=5\text{mm}$

Reference Value = 95.904 V/m ; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 26.03 W/kg

SAR(1 g) = 12.9 W/kg ; SAR(10 g) = 6.05 W/kg

Maximum value of SAR (measured) = 14.8 W/kg



0 dB = 14.9 W/kg = 23.46 dB W/kg

Fig.B.6 validation 2450MHz 250mW

5200MHz

Date: 2013-12-23

Electronics: DAE4 Sn771

Medium: Head 5GHz

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.582$ mho/m; $\epsilon_r = 36.69$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: CW Frequency: 5200 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(5.25, 5.25, 5.25)

System Validation /Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 9.77 W/kg

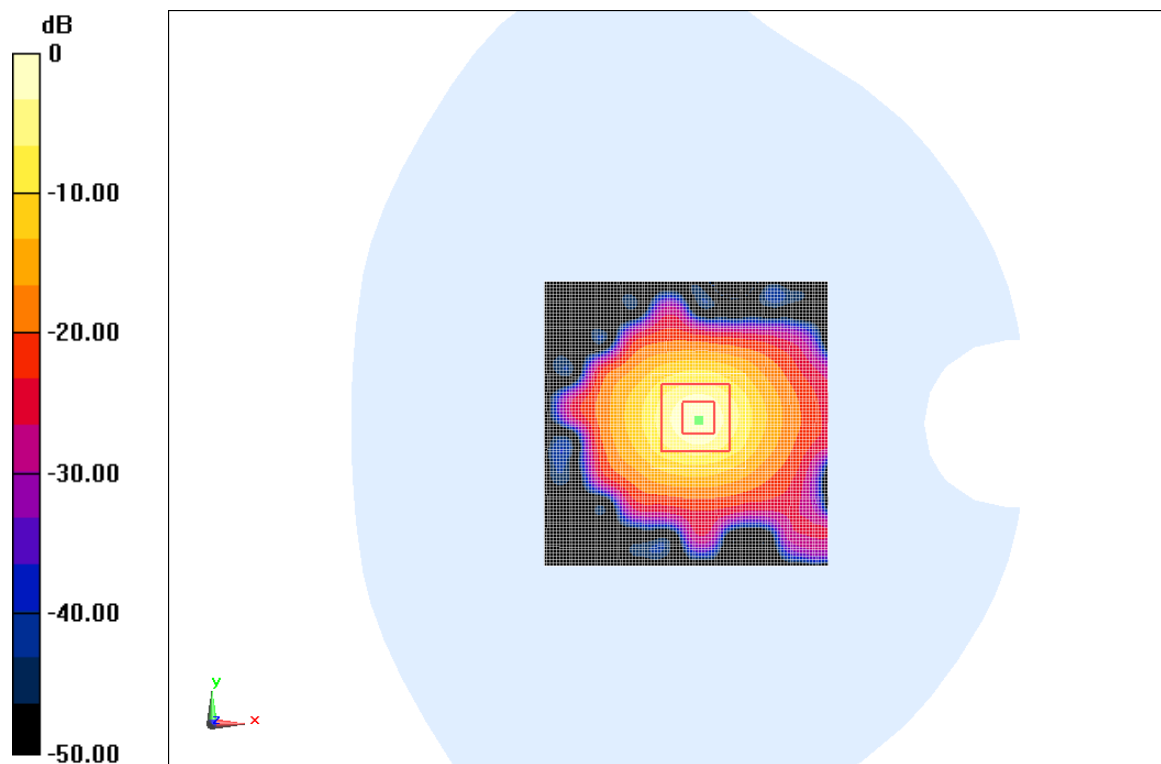
System Validation /Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=4mm

Reference Value = 61.044 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 34.95 W/kg

SAR(1 g) = 8.11 W/kg; SAR(10 g) = 2.30 W/kg

Maximum value of SAR (measured) = 9.80 W/kg



0 dB = 9.77 W/kg = 19.80 dB W/kg

Fig.B.7 validation 5200MHz 100mW

5200MHz

Date: 2013-12-23

Electronics: DAE4 Sn771

Medium: Body 5GHz

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.043$ mho/m; $\epsilon_r = 48.23$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: CW Frequency: 5200 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(4.36, 4.36, 4.36)

System Validation /Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 9.01 W/kg

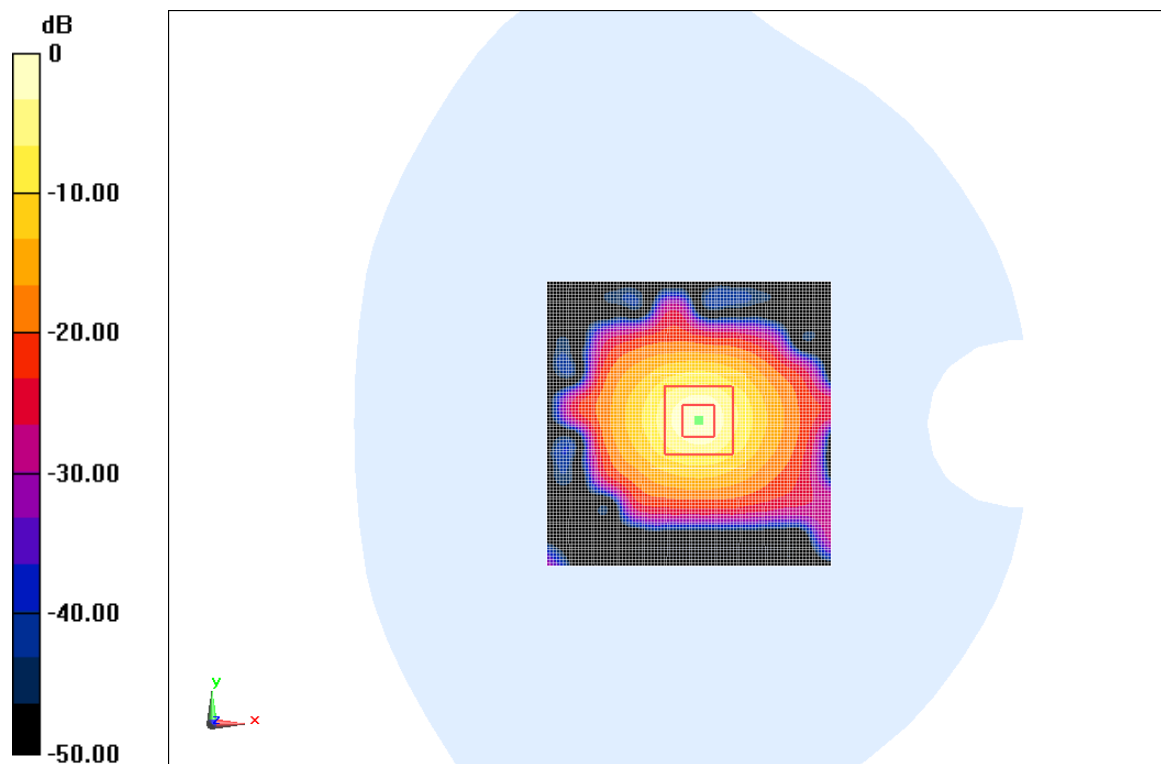
System Validation /Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=4mm

Reference Value = 59.528 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 33.28 W/kg

SAR(1 g) = 7.39 W/kg; SAR(10 g) = 2.08 W/kg

Maximum value of SAR (measured) = 9.05 W/kg



0 dB = 9.01 W/kg = 19.09 dB W/kg

Fig.B.8 validation 5200MHz 100mW

5300MHz

Date: 2013-12-23

Electronics: DAE4 Sn771

Medium: Head 5GHz

Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 4.713 \text{ mho/m}$; $\epsilon_r = 36.47$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

Communication System: CW Frequency: 5300 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(5.04, 5.04, 5.04)

System Validation /Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 9.70 W/kg

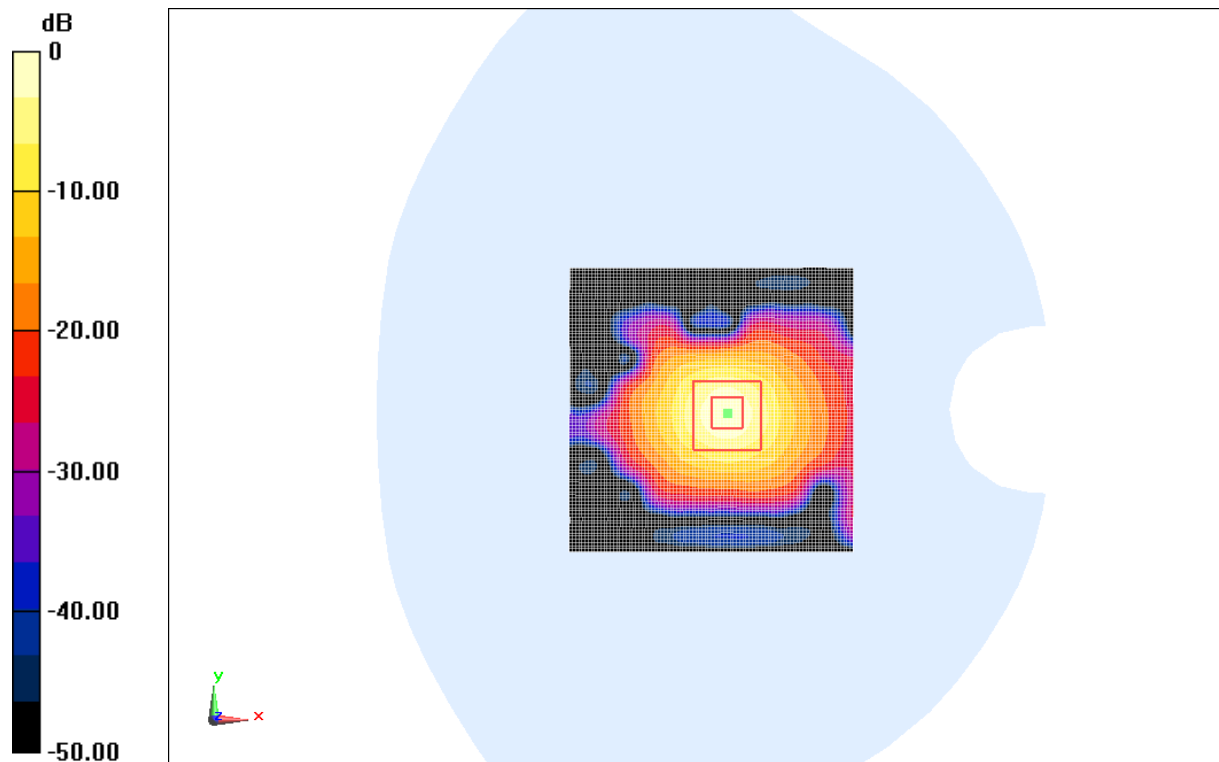
System Validation /Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=4mm

Reference Value = 60.224 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 34.88 W/kg

SAR(1 g) = 8.03 W/kg; SAR(10 g) = 2.28 W/kg

Maximum value of SAR (measured) = 9.72 W/kg



0 dB = 9.70 W/kg = 19.74 dB W/kg

Fig.B.9 validation 5300MHz 100mW